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GROUP PSYCHOTHERAPY IN THE ELEMENTARY SCHOOL

BY LT.-COMDR. J. ROBERT JACOBSON, M. C., U. S. N. R.

The elementary school is the one place where a significant program of mental hygiene may be instituted. This program must have as its objective the prevention of mental illness and the reenforcement of mental health. Modern teachers have recognized these facts and have aimed at promoting the wholesome growth of the whole child. The teacher, however, does not have the psychiatric background for developing the techniques of diagnosis and treatment essential for a mental hygiene program. On the other hand, the psychiatrist who does have this background is not present in the classroom where the problems of diagnosis and treatment arise. In the work described here, a psychiatrist conducted a series of classes regularly, once a week, in the third and sixth grades of a public school in Honolulu. He applied in the classrooms, group techniques of diagnosis and treatment, in much the same way as group psychotherapy techniques have been used with psychotic patients.

The classification of mental illness in terms of those attitudes and abilities which have been lost gives a vivid picture of the attitudes and abilities essential for normal adjustment. A dilapidated case of hebephrenic dementia præcox presents a loss of interest, a loss of power of attention and concentration, a loss of reactivity to the environment, which bring into sharp focus the ability of the normal individual to concentrate upon, to attend, and to react to the ordinary stimuli of life.

Cases of paranoid dementia præcox, paranoid state, and paranoia, very well illustrate a group of individuals who have lost more or less completely the ability to objectify themselves. The most fantastic ideas are expressed and adhered to, in spite of all logical persuasion. Such persons are incapable of profiting by the criticism of others, and cannot accept the possibility that they may be in error.

The hypermanic patient typifies an individual who has completely lost all powers of reflection, deliberation, and forethought. He reacts quickly, impulsively, and abruptly to all stimuli. The

ability to think before moving is largely lost, and any quality of carefulness about the consequences of an act is absent.

The depressed phase of the manic-depressive psychosis, reactive depression, and involutional melancholia, include a large body of the psychotic who demonstrate the loss of ability to deal adequately with the immediate problems of life. They are unable to summon up energy, attention, and interest, because of the presence of a morbid, depressive mood reaction. Anxiety states and states of panic illustrate vividly the inability to concentrate upon a given task in the presence of disturbing fear reactions. The chronic resentment and rage reactions of the paranoid psychotic patient demonstrate the way these emotional reactions influence the ability to attend to anything except persecutory delusional ideas.

The delirium which is present in organic psychoses and the confusional states which are present in greater or less degree in the acute functional psychoses exemplify disorganizations of the total personality which may take place in the mentally ill. All degrees of disorganization may be observed in the psychotic.

It is apparent that if one observes the way a mentally ill person reacts, and describes him in the same terms used to describe a normal individual, one will have a body of knowledge which can be applied in developing a mental hygiene program in the classroom.

The techniques used by the psychiatrist with normal children in elementary school classes were designed to discover the individual's assets and liabilities in terms of qualities of behavior, those qualities psychotic individuals have lost and thus those essential for normal adjustment. They are: (1) powers of concentration and ability to attend to a task; (2) ability to take criticism, to realize error, and to criticise oneself; (3) ability to think before acting and to consider consequences; (4) ability to handle oneself in the face of emotional disturbance; and (5) ability to handle oneself in the face of confusion.

The techniques used were designed also to develop the individual's potentialities for improved adjustment. All the work with individuals was done in the group, so that the delineation of one child's problems was instructive for all, and the adjustment of the individual to the group and the effect of the group upon the individual were constant factors. Group morale, group standards,

group approval were recognized as highly important in social adjustment.

The techniques employed* made use of familiar subject matter. The class conducted by the psychiatrist appeared to be a reading class.

The Techniques Employed

1. A child was asked to read just one word. This gave a measure of his ability to attend to the direction given him. It also gave an idea of his ability to control his impulsiveness.

2. Children were asked to read single words, in turn, around the class. This was a quick way of picking up the inattentive child, who would not know the place.

3. A child was asked to read just one letter of a word. This procedure was unfamiliar to him, and he might either read the word, or become confused. If the direction was repeated, a correct response might be obtained. The number of repetitions necessary to elicit a correct response offered some measure of the child's powers of attention, and of his ability to get hold of himself in an unfamiliar situation. The procedure also offered some basis for lessening a child's inattentiveness.

4. A child was asked to name particular letters in a word, as the next to the last letter, or the second letter. Some children, who had no difficulty reading a single word, found this apparently simpler task difficult, and demonstrated their confusion, or their inability to think before speaking, or their inability to attend carefully to the directions given them.

5. A child was asked to read alternate words, or alternate letters of a word, with the psychiatrist, who could, at will, alter the length of the interval between his response and the child's. The period of pause was one of considerable stress for the child, and various emotional reactions appeared. It was possible, during the pause, to emphasize those qualities of thinking which the particular child needed.

*For comparison with the techniques used by the author for group psychotherapy with hospitalized patients, see bibliography: Jacobson, J. Robert, and Wright, Katherine W.

6. A child was asked to read alternate sentences with the psychiatrist. This tested his powers of attention in a social situation, into which meanings also entered, as they did not when alternate words or letters were called for.

7. The psychiatrist read several sentences rapidly, and called on a child to continue the reading. This procedure called for concentrated attention throughout the class. It emphasized the need for attentiveness when the child himself was not the active performer. It offered a measure of the child's ability and willingness to take the responsibility for his own attention, in a social situation.

8. A child was asked to read a whole sentence, or several sentences, to the class. He was advised to think of the meanings of the words he was going to read, and of the sound of the words; to listen to himself as he spoke; and to criticize himself when he spoke. His audience was reminded that the audience was very important to the reader; the interest of that audience supplied the measure of the quality of the reader's performance. Criticism of the performance was supplied by the psychiatrist, who stressed the fact always that anyone could make an error—error was not disapproved of—but that the child's reaction to his own error was the important thing. Could he take the criticism offered him? Could he profit by it and show improvement? This procedure was used to measure the child's reactions to objective criticism, and to build group standards of performance and of willingness to take criticism in any situation.

9. The task given to a confused child was simplified until his confusion was resolved, and his frustration in the face of failure was replaced by satisfaction in a successful performance. Simplification might go to such lengths as having the child write a single letter of the alphabet on the board. The same technique was used with the child who was emotionally disturbed, or unable or unwilling to respond. In such instances, the task was made so simple that the emotional nature of the child's difficulty was apparent to him and to everyone in the class.

10. All of the techniques mentioned were modified to suit the peculiar problems of a particular child. Sometimes even the appearance of a reading class was lost, as a particular child was dealt

with. A child unable or unwilling to read a sentence might be asked to read the first word; if he made no response, he might be asked to read the letters of that word; if he still made no satisfactory response, he might be asked to copy the word on the board; to read the word from the board; to name the letters of that word. Or he might be asked to write the first letter of the alphabet, and to name the letter he had written. When his reactions and behavior had been analyzed for him and for the group, the reading was resumed.

Case Studies

Case 1. Junius, an eight-year-old boy in the third grade, referred to the group as a case of reading disability, illustrated extreme inability to maintain the veriest minimum of attention, concentration, and interest. His behavior was in keeping with his disturbance in thinking. He looked and acted limp and lifeless. He did not sit up. He did not hold his head up. He showed in his general posture the same lack of energy and interest that he showed in his erroneous responses and his lack of response in the learning situation.

He appeared unable to read a sentence, or a specific word in a sentence in a primer. His responses, when he was asked to name the letters of a word, were inaccurate and unpredictable. On rare occasions, he named the letters correctly. At other times, he appeared unable even to be sure of a single letter after he had been taught it several times. Sometimes, when two letters of a three-letter word had been named for him, he suddenly responded with the whole word. Sometimes he "read" a few words from a line, but gave them in the wrong order, and omitted the rest of the words.

A number of his responses indicated a deliberate perversity, so, on one occasion, part of the alphabet was written on the board. Junius named the first letter correctly; he was asked if he was sure that the letter was A, and he said he was sure. The psychiatrist said he thought that letter was B, not A; but the child maintained it was A. The same process was repeated with the letter B, which the psychiatrist insisted was C. Finally Junius said, "You're fooling me." The psychiatrist's answer was that he had been fooling

Junius, just as Junius had been fooling him, when he had pretended not to recognize letters and to be sure of them. The child was advised not to indulge in that sort of fooling again.

Two weeks later, Junius stood erect, and showed poise as he instantly read a whole sentence when he was called on. The following week, he again reacted satisfactorily, and showed marked improvement in sustained attention when he kept the place under very difficult conditions. Two weeks later, he "read" a sentence that was not on the page, and showed a sullen unwillingness to attend to the simplest task. He appeared unable or unwilling to read the letters of the word "but." After patient and intensive work had been done with him, and he had read the letters and the word several times, the quality of his attention improved, and once more he managed to read an entire sentence without help.

One striking feature was the variability of Junius' inattentiveness. In the course of patient emphasis upon accuracy of performance, and insistence upon the boy's own responsibility for maintaining his own attention, a gradual improvement took place. He showed a more reliable quality of attention and concentration, and an unsuspected ability to read, but he was unable to maintain this peak of improvement, and for a time, he sullenly resisted all efforts to help him.

This child had been so profound a problem in school that all efforts at teaching him had been given up as hopeless. He had thus been completely relieved of the need to apply himself in the learning situation. The techniques now employed placed considerable pressure on him to assume the responsibilities he had succeeded in evading. His sullen resistance was his endeavor to return to his former more comfortable state of idleness. That it was a rebellion was shown when he actually told his own teacher that he would not recite.

Another form of pressure was then exerted by enlisting his mother's assistance in teaching him. She was present when the psychiatrist took the class; and she observed the patient and detailed work done with her son. She received an outline of the procedures to use with him at home. The room teacher also used the same procedures with him. Thus, there was developed a systematic program for the socialization of this child whose perform-

ance in school had been one characteristic of the imbecile. In this particular child, however, the poor performance was related to inability or unwillingness to maintain adequate attention and concentration. The inability to adjust to the school situation was comparable to that observed in cases of dementia præcox, where personality factors rather than lack of native intelligence underlie the illness.

Case 2. Richard, 11 years old and in the sixth grade, did not have the place when he was asked to continue reading. He was asked to read alternate words with the psychiatrist, but he read the word "that" as "there." When "there" was written on the board, he read it "then;" when "then" was written, he read it 'this." He named the letters of each word correctly, but continually mixed the words when he read them. He named correctly the floor, the ceiling, the door, the window, the table, the chair, the eraser. Each time he did so, the psychiatrist told him he was wrong. He said that if the boy was sure he was standing on the floor instead of on the ceiling, sure that the eraser was not an orange, that he must be sure of the word at which he looked. The psychiatrist was acting on the assumption that Richard did not have a reading disability or suffer from an alexia, but that he had a normal attitude toward the objects at which he looked, and a very peculiar one toward words. He made use of the normal attitude toward objects to demonstrate the seriousness of Richard's wrong attitude toward words. He worked with Richard until the boy was sure of two words, "this and "then."

The following week, Richard read so carefully and so well that his performance was distinguishable only by the great care he showed. He was then called to the board where he showed no difficulty whatever in writing or reading the four words which had so troubled him the week before. One must assume that emotional factors underlay the previous poor performance and that a change of attitude toward his own reading had brought about the remarkable improvement.

It had been thought that Richard's difficulty was worse than Junius', because Richard was older, and his habits of inattentive looking might be assumed to be more deeply rooted. His inability to adjust in school was serious, and he had been considered to have

an extreme disability in reading. A few minutes of intensive work gave the boy the help he needed to get hold of himself and to take the active responsibility for his own careful attentiveness. The elucidation of the nature and seriousness of Richard's problems was significant for the entire class, and emphasized for the pupils the value and desirability of active attentiveness as the most important personal possession of each child. The improvement in Richard's performance demonstrated how much could be done by each child to improve the quality of his own attention.

Case 3. Robert, an eight-year-old third grader, read with a poor accent and tone. Although these were criticized repeatedly, no change in his performance resulted. In addition, he showed increasing signs of resentment, and he became provocatively inattentive during the classroom sessions. Criticism was then directed, not at his performance, but at the way he reacted to the psychiatrist's efforts to help him. His attitude eventually changed very markedly, and he began to show a striking ability to accept and to profit by critical suggestions. When Robert's reactions were dealt with, the tendency of everyone in the class to become emotionally disturbed over any criticism given his own performance, was also dealt with. Self-objectivity was increasingly incorporated in the members of the class, as the psychiatrist continually stressed the fact that it was not error that should be disturbing; but only the inability to make an effort to correct that error.

Case 4. Richard, eight years old and in the third grade, illustrated another reaction to criticism. He was eager for criticism, and very anxious to correct his errors. He showed no resentment at any time, and he improved up to a certain point. He had an intense need for praise, and he had certain limitations in performance. When he was not able to perform as well as the rest, he became increasingly disturbed over his relatively poor showing. He then reverted to a type of behavior which had characterized him throughout the previous year. He played truant one day and hid in the bushes. When he returned to the class, he showed confusion, inattentiveness, and utter inability to read. When he was encouraged, and the situation was simplified for him, he was again able to resume his customary level of performance. Thereafter, criticism was only sparingly administered, with the knowledge of the emo-

tional instability which existed. Until he could be made more stable emotionally, only a limited pressure in the learning situation could be applied.

Less marked emotional reactions to criticism were found in many children. They, however, rather quickly adjusted themselves as they became aware of the possibility of applying criticism to themselves as the way of doing a better job.

Case 5. Gertrude, eight years old, was referred to the third grade as having a reading disability. She looked very apathetic and listless. Her reading responses were careless and impulsive. When she was asked to read one word, she read several. She did not wait when the psychiatrist said he would read one word, and she the next; when he paused before reading, Gertrude read his word. When she was sent back to begin over again, she read incorrectly the words she had previously read correctly, and when her error was commented upon, she made the same mistake again. Her impulsiveness, her tendency to carelessness, and to become rattled, were described for her. She remained listless through the period and failed to know the place later when she was asked to read one word after several children had been reading single words in turn.

The following week, Gertrude knew the place, in a much more confusing situation. She demonstrated such improvement that the psychiatrist worked with her to find out the extent of her improvement. He asked her to read the first letter of the first word; the last letter of the first word; the last letter of the next word; the first letter of the last word. Gertrude became confused only on the last direction, but she maintained her attention in spite of her confusion, and after the situation had been simplified, and then again made complicated for her, she responded correctly. In all the succeeding weeks, Gertrude's concentration and attention never slipped; nor did she again become rattled and confused. She proved able to follow the most rapid reading, and demonstrated over and over again that she had no disability in reading. For Gertrude, one delineation of her problems was sufficient for her to get hold of herself. Her change in expression and in attitude was marked; her level of concentration and attention, instead of being extremely low, reached a high level and remained there.

Case 6. Henry, seven years old and in the second grade, was referred to the psychiatrist as a behavior problem. He looked and acted worried and anxious. He sucked his thumb, and paid no attention when his thumb sucking was mentioned. He appeared unable to name the letter A printed on the board, or a wooden block letter A placed in his hand. He named an object put in his hand, a ball, but when he had done this, he burst into a flood of tears and held on to the psychiatrist who took his crying for granted as a type of behavior in which we all may indulge. Then the letter A was written on the board, and Henry was told what it was. He managed to repeat the name of the letter. He named the block A held before him, and when he was asked to write that letter, he did so immediately. This achievement was lavishly praised. Henry continued to sniffle, and to rub his eyes from time to time throughout the rest of the period, but he peered through his fingers to see what was going on.

The next week, Henry presented himself voluntarily for the special class, though he had been in the habit of slipping away from his own classroom every time he had the chance. He had not run away that week. Henry came regularly to the special class, and though he was younger than the other children, he paid attention to the reading, and took part when he was called on. He never showed again the signs of discomfort he had shown that first day, and his own teacher reported that his behavior was greatly improved.

The primary basis for Henry's antipathy to classroom procedures was his fear of the group and of the teacher. When, in spite of the most grotesquely poor performance, he received praise, his insecurity was removed. After his first appearance in the third grade, he had bragged that he was the best student there. The pleasure he had derived from the praise given him provided for him a motivation for the discontinuance of his bad behavior.

Case 7. Ralph, an eight-year-old third grader, appeared inattentive, and his responses showed that he was dreamy, lackadaisical, and easily distracted. His indifference and inattentiveness were considered superficially analogous to the lack of interest present in a case of dementia præcox. There was a decided undercurrent of resentment and hostility not unlike the hostile negativism

present in a case of catatonic hebephrenia. Ralph demonstrated his normal potentialities when his indifference was dealt with directly and when his antagonism was described to him as a willful attitude which he alone could correct. He exhibited a remarkable change in attitudes, attention, and concentration, and on a number of occasions was the most attentive member of the group. An amusing incident demonstrating a perverse impishness occurred when he sat sprawled in his chair, his head buried in his arms, in an apparent attitude of complete inattention, but showed at that same moment, in a very complicated situation, a quality of performance far above that of the other members of the class.

Case 8. Emmaline, an eight-year-old third grader, could not read a sentence. She was rarely able to read a word and could not be depended upon to read even the letters of a word. One characteristic feature was the prodigious effort with which she completed even the simplest performance. She became rigid, and appeared very intense, though the performance might include only the minimum of reading. Another characteristic feature was the fact that when others were reading, she was actively attentive, and almost invariably had the place, though she was usually unable to read the word at which she looked. She was obviously giving all she had, but the reading result was almost invariably bad. She was a socialized individual who was trying hard to cooperate in the classroom, but who was failing in achievement.

On one occasion, she was unable to read the word "from." After she had been helped to name the letters of the word, she still appeared unable to read the word, so it was pronounced for her, and she was asked to repeat it. Because she spoke the word in an uncertain manner, she was asked again, "What is that word?" She did not reply, so the question was repeated. After a long pause, she suddenly answered with assurance. Why did it require so long a time to say the word she knew? The word had been spelled; it had been given her; she had even repeated it, but in an uncertain manner. Her uncertainty was a persistent characteristic and was considered fundamentally related to her blocking in speech. Visual attentiveness was her asset, but her blocking in speech was con-

sidered analogous to that seen in a case of catatonic dementia præcox. The aim with her became to influence her blocking in speech, by increasing her assurance and pleasure in speaking.

The Group

Each child was made keenly aware of the other members of the class as an important factor in his own performance. He was faced with the problem of adjusting to the other children present in a simple act of reading. They, in turn, were made aware of their obligations and responsibilities to the reader. Thus there was built up a to-and-fro relationship between the group and the individual, as each child became in turn a performer or a member of the audience. Certain standards of behavior, applicable in any life situation, were developed for the individual and for the whole group.

The concept of the group as a whole proved one difficult for the eight-year-olds to grasp. Gradually, however, they did demonstrate their ability to include their audience in their performances, and to assume their social responsibilities as members of the group.

The 11-year-old sixth graders had a much more highly developed social awareness, and it was possible to devote a few minutes of each meeting to brief discussions of personality factors and group responsibilities. The whole group was brought to concentrate upon specific concepts, such as the importance of the powers of attention in the healthy individual; the fact that everything a child did revealed what he was; the significance of controlling oneself in spite of mood reactions, restlessness, or sleepiness; the importance of thinking before acting; the significance of the concentration of all members of the class upon the same thing at the same time; the purpose of criticism, and the significance of being able to profit by the criticism given.

As the procedures were varied, and individual differences among the members of the sixth grade were made clear, a group spirit quickly developed. Any slight tendencies toward a lessening of attentiveness and interest, with the resultant disorganization of the group as a working unit, were readily corrected by calling attention to the let-down, and presenting it as a challenge to the next performer. He must include the problem of the group morale in his performance.

The responsibility for maintaining a level of social cohesiveness and community of purpose was accepted by the class. The response of the 11-year-olds was frequently inspiring. The group as a socializing force became a constructive part of each child, and in turn each child's performance contributed to the group morale.

Conclusions

1. Psychiatric techniques were made the basis of a series of classes in the elementary school.
2. A number of individual problems of maladjustment were diagnosed and treated.
3. Social standards of adjustment were built up for the group, through clarifying the problems of individuals, and through the direct presentation of group standards of behavior.
4. The procedures described offer a practicable basis for a mental hygiene program in the elementary school. The techniques themselves are simple. A training program for teachers has been instituted, with the aim of shifting such work, under supervision, to the teachers.

Addendum

Present Status of Group Psychotherapy Program

The following notes on the reception of the program by the teaching staff, its expansion and its current status are presented at the request of the editor of The Psychiatric Quarterly. They are from the report of Miss Helen Gay Pratt, curriculum supervisor, to her superintendent of schools and were submitted in the superintendent's annual report to the governor of the Territory of Hawaii.

Miss Pratt notes that before Commander Jacobson left the islands in February, 1944, under navy orders, "his program had broughts about dramatic improvement in children. He had trained a number of people to carry on the special language program. It was expanded in Lunalilo School [where it had been developed] after he left, and the results surprised even the teachers who had directed the work. The most remarkable growth was made in the first grade, where an unselected group, drawn for the most part from poor language backgrounds, reached an English Standard level of performance by the end of the year.

"It was discovered that the best way to spread this program was to have teachers and principals observe the work, share in it, and then study the principles involved, before they initiated it. For that purpose, it will be carried on in a summer session in Lunalilo School during the summer of 1944. In the fall, the work will be initiated, under supervision, in at least two new city schools. The writer, who assisted Dr. Jacobson from the beginning, and took part in all the work, is responsible for the supervision of the special program wherever it is possible to initiate it. . . . the principal of Lunalilo School took part in all the special classes in her own school, and, with some of her teachers, became expert in the handling of the techniques. She and her specially trained teachers will be able to give some help in other schools, but only a limited amount, as their hands are full with their own work in Lunalilo.

"There is no question whatever about the effectiveness of the program. It is practical; it is a definite program for getting at that whole child who has eluded us before; it develops children who are self-controlled, confident, attentive, unworried, eager to learn, and proud of their ability to learn. But the program must, of necessity, expand slowly; it must be handled correctly and with full understanding, and that means it must be initiated under supervision."

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THE OATH OF HIPPOCRATES

BY ARTHUR N. FOXE, M. D.

When institutions are attacked on all sides, there must follow some fighting back. Nonetheless, it is not amiss to inquire into some of the origins of the attack and the origins of that which is attacked. Modern medicine traces much of its strength back to the great Grecian era and its culminating representative in Hippocrates. Patients today, as then, are more or less loyal. They rarely criticize physicians for failing to cure them, unless there is a belief that the treatment was given not entirely in good faith. The average patient is highly reasonable in spite of his pain and suffering. The attacks on medicine, therefore, must have a different source and origin.

There is little doubt that those within, as well as without, the profession of medicine would find eminently satisfactory as a guide, the now famous Hippocratic Oath, known of, rather than truly known. Thus, while medicine withstands assaults from here and there, it might be wise to examine carefully, for a source of strength, that which hardly is susceptible to attack; to find wherein the profession has been derelict; to correct from within the weaknesses of the group to which people look so desperately for help. Too often, the medical student hardly knows what he does when he takes the Hippocratic Oath. Too often, it is an empty and sufferant formality. Perhaps it is well that some further understanding come from the realm of psychiatry.

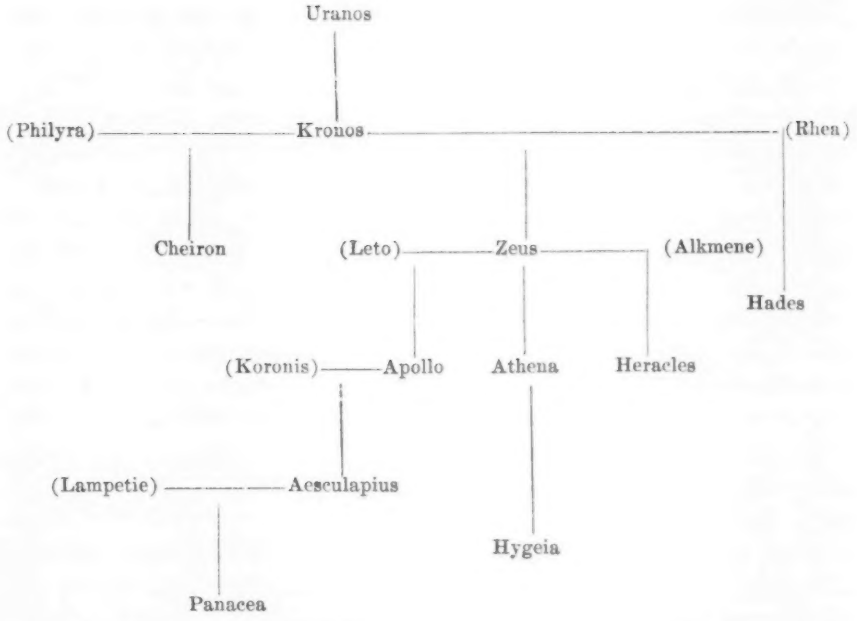
The oath is as follows:

"I swear by Apollo the physician, and Aesculapius, and Health (Hygeia), and All-Heal (Panacea), and all the gods and goddesses, that according to my ability and judgment, I will keep this oath and this stipulation—to reckon him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this Art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my brothers, and to disciples bound by a stipulation and oath according to the

law of medicine, but to none others. I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practise my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further, from the seduction of females or males, of freeman and slaves. Whatever, in connection with my professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art, respected by all men, in all times! But should I trespass and violate this Oath, may the reverse be my lot!"

An examination of the beginning of the Oath shows that the physician swears—that is, he dedicates a good portion of his being, belief, and loyalty unto the oath. Four Greek deities then are named. Unfortunately, today this oath is an adumbration and these names are not those of currently accepted Gods; their connotation, if known at all, is relatively feelingless. To the Greek physician, the taking of this oath must have been something different. It might be helpful to learn what these names mean. Before proceeding, the names of the mythological figures to be mentioned herein are given in family tree form for the reader's convenience and for the sake of lucidity.

Apollo was the healing God. In the oath, therefore, the physician dedicates himself firstly and above all to healing, the act of healing. Money, power, prestige, submission, poverty, or self-effacement are not placed first—but healing. To heal, there must have been a wound or disease inflicted by someone or something. One does not heal people who are not wounded or ill. Such an explanation might seem superfluous, but a quick glance through much



that is labeled as medicine, today, indicates that there are times and places where one must wonder where the healing is.

Whom does one heal—friend or foe, rich or poor, man or beast? When much is taken for granted this may seem to be an idle question, but in this world there are strange paradoxes of wounding and healing by the same groups. Then some speak of punishing and others of curing the same condition. Some say, "forget it" and some say "do something" about it. What is the meaning of these conflicting views and what is the individual physician to do? Some help may be gathered from an examination of the origins of Apollo or Phoebus-Apollo, who, in his healing guise, was a later manifestation in Greek mythology. In this guise, there may be a considerable compaction of what has gone before.

Apollo was the son of Zeus and Leto. Leto was something of a wanderer and was persecuted by the implacable Hera. Once when mocked by some buffoons, Leto cried, "May you live forever in that pool!" They were turned into frogs. As for Apollo, his arrows and those of his sister Artemis converted Niobe into stone for having offended their mother. Thus Apollo and his mother, themselves

persecuted, gained safety by converting the persecutors into stone or an animal form. They allayed hostility, persecution, and perhaps envy. Apollo defended the Gods. All sudden deaths of men were ascribed to his darts—sometimes as a reward and sometimes as a punishment. Apollo, therefore, was not merely the sparer of all life. He defended the Gods, at times by bringing an end to life if necessary. He, in some euthanasic way, could make death a reward. He was the God of archery, music and prophecy. With his powers in archery, he could bring or do away with pestilence. He could refuse to heal and actually could bring about disease. Apollo killed the python near his temple for his temerity in preying on man and cattle, and for having attacked his mother. Apollo thus might kill animals to protect his loved ones and followers. Apollo gained his first adherents while assuming the shape first of an awe-inspiring porpoise and then of a handsome youth. His form and personality were not fixed.

To Homer, Apollo was all purity and dignity, the friend of man, the protector of his worshipers and the punisher of the unjust and impious. His actions to all were not the same. He was the "Pure God." "There is a serene cheerfulness always ascribed to him, he is averse from gloom, and the promoter of joy and innocent pleasure; but at the same time dignified in his sentiments and actions." His love affairs were unfortunate ones, and he was either repulsed or the affair would terminate fatally. Daphne enjoyed his chase but she seems to have been frigid. Koronis was unfaithful to him. He shot Koronis and then vainly tried his healing art on her. Marpessa chose a more certain and more mortal lover in foregoing Apollo. Cassandra betrayed her promise to him. Of all his amours, only one was with a goddess. Even his favorites among men met misfortune. Thus Apollo seemed destined to pursue something of the tragic and painful life of his mother and yet withal to bear it serenely.

The arts of prophecy and music were inherent in Apollo through the mission of Zeus to bring right and justice to the Hellenes. Light, warmth, summer, music, and beauty are the later attributes of Apollo when all sense of persecution, revengefulness, and fear were effectively conquered within him. He surmounted a difficult, tortuous, and painful past. In the Apollo Belvidere, may be seen

the union of manly strength, beauty, benignity and perfection of this god. Therein is seen the fusion of his healing and avenging, reconciled in that a perdurable healing itself undoes the work of the one who wounds another. In a more noble position, one might imagine Apollo healing all wounds, even those he himself had inflicted in a less knowing period, as he once before had attempted with Koronis. It is then of no small significance that the opening words of the Oath are, "I swear by Apollo." Apollo is a rare ideal to set store by.

The second name in the oath is that of Aesculapius, son of Apollo by Koronis. Koronis, another myth has it, was placed upon a funeral pyre rather than shot by Apollo. Apollo belatedly rescued the child Aesculapius from the funeral pyre upon Koronis' pleadings. Aesculapius became famous for his healing powers as well as for his ability to restore the dead to life. He aroused the enmity of Hades, brother of Zeus, whereupon the bellicose Zeus, with his thunderbolts, deprived Aesculapius of existence. It is apparent that Aesculapius, patron deity of the Asclepidae or priest-physicians was something of a revolter, envied by no less a deity than Hades, his uncle. One may well wonder at his healing powers to the extent of raising the dead. In this light, it is well to recall that his father had failed to heal his mother after his wrathful deed; this might in some way account for the continuation of healing powers in Aesculapius. Aesculapius was reared and taught medicine by Cheiron the Centaur, half-man, half-horse. Cheiron was the offspring of Kronos and Philyra. Zeus was the offspring of Kronos and Rhea. Thus Cheiron and Zeus were half-brothers; Rhea, the mate of Kronos was quite jealous of Philyra. Aesculapius was helped by a half-uncle (Cheiron) and envied by an uncle (Hades). Aesculapius was the grandson of Zeus.

Kronos had mutilated his father Uranos, only to be overthrown by Zeus in turn. Both Cheiron and Aesculapius were the children of lesser female personages; somewhat adventurous and persecuted mothers. Zeus symbolically continues the rivalry of mothers in the destruction of Aesculapius, protégé of Cheiron. Cheiron might be the avenger of Kronos and his threatened mother, through healing, undoing injury, and then in training Aesculapius. Aesculapius is concerned with the raising of the dead—presage of Hamlet. Aes-

culapius' desire to heal would represent the preparation for his father's failure in healing, the resuscitation of his mother and, through Cheiron, the unwitting avenging of (again through healing and undoing) his great-grandfather's death at the hands of his grandfather Zeus. The whole mythology is filled with patricide (killing of the father) and parricide (killing of any near kinsman) and their ultimate expiation. Healing becomes a transmutation of killing when killing and its static counterpart death, brought unhappiness and were not avenged or avengeable directly; healing also would involve the recovery of injured persons that they might seek redress for their injuries. Aesculapius to an extent, then, is an instrument of justice. And, indeed, Homer praises his mentor Cheiron for his love of justice. Cheiron also was noted for his uprightness and skill in surgery. Cheiron was accidentally and grievously injured by one of Heracles' poisoned arrows. The accidental wound appears here for the first time and conceals deliberate deed and pardon. One must wonder, for Heracles was a son of Zeus by Alkmene; her conception followed Zeus' assumption of the form of her husband while the latter was away on an expedition. When wounded by Heracles, Cheiron prays to Zeus for aid to die (he was immortal); he is so assisted; deigning to forgive and the lending of mutual assistance begin to replace the fierceness of the earlier mythology.

At Epidauros, seat of worship of Aesculapius, Aesculapius was considered to have been exposed after birth rather than rescued from the pyre by his father. A herdsman discovered the babe, and perceived its body emitting a brilliant light; then sprang the fame of the healing powers of this child. The birth is mystified, glamorized and made glaucous; the preceding history of violence is conveniently expunged, while ruth appears.

The origin of Hygiea, Goddess of Health, is somewhat obscure in Greek mythology. Early, she is worshiped in some association with Aesculapius and only later appears more clearly as a separate figure. As Aesculapius owns his descent from Apollo in his healing powers, so Hygeia seems to have been an offshoot of Athena in her health-preserving function. Although descended from Athena worship, Hygeia gradually emerged into the conceptual rôle of being Aesculapius' daughter and finally his wife.

It is interesting to observe that Athena more or less changed her character with a change in the manners or institutions of the people. This would fortify the position of her being the source of Hygeia. Athena originally issued forth from the head of Zeus (an intellectual woman). She would be a motherless child with a strongly patterned trend from her thundering father. Athena was the Goddess of Wisdom, Skill and Science. She was the protectress of the prudent, and the inspirer and teacher of the artist. Hygeia and Aesculapius would seem to have been cousins, the myth later altering the relationship.

Panacea (All-Heal) was the daughter of Aesculapius by Lampetie. As an obscure deity, it is difficult to interpret what All-Heal might mean; heal all diseases, heal all people, or perhaps be all concerned with healing—the true rôle of the nurse in the modern world.

This first part of the Oath of Hippocrates ends by reverently closing the polytheistic system with the inclusion of all the gods and goddesses. The mere parade of names of the mythological figures, gods and goddesses, in a modern oath given to a medical student, is meaningless without the foregoing understanding. Already in this discussion, this first brief part of the oath might be rewritten to read as follows: "I swear to join with the forces that heal in wound and disease, for man and mankind, with an attitude of courage, kindliness, protectiveness, cheerful serenity, and dignity. To help where all others despair even unto the suspecting of death. To aspire and work ever to perfect my wisdom, prudence, skill, and science. To heal all wounds, all diseases, and all people to the best of my ability and judgment."

The remainder of the oath is not so obvious as one might expect, considering modern medical ethics. The oath indicates that one's teachers are to be considered as one's parents and to be held "dear." In our day when a physician's knowledge comes from so many sources, it would include one's professors at college, one's teachers in interneship, one's preceptors in practice, the author of some article that one has read, and other influences too numerous to mention; each of these would represent the parent figure in varying kind and amount. One's debt would extend to those physicians of antiquity who have transmitted much of our knowledge to us.

In other words, one is instructed to give due credit to the source of one's knowledge in the true spirit and degree in which it was given and to be ready to reciprocate in like spirit and degree. Those who taught an individual most would indeed be like parents; others would be like brothers, cousins, friends, acquaintances and so on. One would teach without fee or stipulation, one's brother most, a cousin less. One would treat without fee or stipulation as one would treat brothers, cousins, and so on, in appropriate degree. It is significant that the oath does not imply the teaching of disciples without fee. It is indicated, further, that all who are taught, are taught according to the laws of medicine and that one teaches one's sons, the sons of one's teachers and disciples.

The oath on deleterious or mischievous regimens is of obvious import today as is that on poisons. The oath on abortions may find more lax attitudes today, but one might hope that abortions, some day, will be replaced by the adopting out of unwanted children rather than their destruction. The demand for purity and holiness in one's life and practice is high indeed. The oath on cutting for stone might easily be applied today for all specialties.

One must conjure, in our age of miching gossip, upon how strict the oath is on the secrecy of medical information and that it applies in all forms whether heard from the patient or elsewhere. The only permission to speak would have to come from the person involved.

It is now possible to rewrite the oath in a form more comprehensible to the modern mind. It becomes a noble oath, the culmination of Greek medicine, not so nearly approached before or again.

"I swear to join with the forces that heal in wound and disease, for man and mankind, with an attitude of courage, kindliness, protectiveness, cheerful serenity and dignity. To help where all others despair even unto the suspecting of death. To aspire and work ever to perfect my wisdom, prudence, skill, and science. To heal all wounds, all diseases, and all people to the best of my ability and judgment. To look upon my teachers and others from whom I learn, as my parents: to share with them appropriately, and in like manner relieve their necessities if required. To teach the son of my teacher as if he were a brother and without fee or stipulation. To teach only my son, my teacher's son, or a true dis-

ciple, and to teach according to the law of medicine. I will do that only which is for the benefit of my patient and not that which is deleterious and mischievous; these practices too I will do to the best of my ability and judgment. I will give no deadly medicine to anyone if asked, nor suggest any such counsel. I will not advise abortion unless the life of the patient be truly jeopardized, but rather will advise adoption if necessary. With purity, good faith, and rectitude I will pass my life and practice my Art. I will not act as if I were a specialist in a field not my own, but will seek appropriate consultation and advice when possible. Into whatever homes I enter, I will go into them only for the benefit of the sick and will abstain from every voluntary act of mischief, injury, and seduction. Whatever I hear from patient or other source which has to do with the treatment or the practice of medicine and which upon careful consideration, should not be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the Art, respected by all men, in all times! But should I trespass and violate this Oath, may the reverse be my lot!"

* * *

The author is indebted to numerous texts and papers on mythology for much of the material presented.

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ALZHEIMER'S DISEASE FOLLOWED BY PARALYSIS AGITANS

A Case Report

BY F. H. LEAVITT, M. D., AND F. H. LEWEY, M. D.*

Thirty-five years ago, Alzheimer reported a group of patients showing the characteristics of the presenile dementia which today bears his name. Perusini (1909) and Simchowicz (1911) confirmed his observation that such patients in their fourth to sixth decades of life begin to experience emotional disorders, followed by disorientation and rapid loss of memory and intellect, and ending in a few years in the deepest dementia. These symptoms of diffuse cortical involvement are accompanied by focal signs such as aphasia, apraxia and occasional convulsive attacks. Microscopic examination of the brain reveals atrophy of its convolutions and marked cell loss, with subsequent proliferation of the fibrillary glia in the upper cortical layers, while the preserved large nerve cells of the deeper strata demonstrate Alzheimer's fibrillary change. Numerous senile plaques are distributed all over the cortex. Frontal lobes and Ammon's horn are found to be most commonly involved with the temporal lobes next, less frequently the central and parietal lobes. The occipital lobes are usually free. The atrophy of the left temporal or frontal lobes may reach such a degree as to give the impression of being Pick's lobar atrophy. In fact, certain cases of Pick's atrophy are characterized by the histological marks of senile dementia. The clinical phenomena of Alzheimer's disease corresponding to the just-mentioned localization of the pathological process are exclusively of cortical nature.

F. H. Lewey reported in 1913 that paralysis agitans represented a subcortical varient of Alzheimer's disease with abundant fibrillary changes in the nerve cells of the basal nucleus, to a lesser degree in the large nerve cells of the corpus striatum and with fatty degeneration of the pallidal cells. Continuation of this investigation revealed in 85 clinically and pathologically examined cases that Parkinsonian patients almost invariably slipped eventually into senile dementia provided they lived long enough to reach this stage of the disease.

*Since this paper was written, Dr. Lewey has entered active military service as a major in the army medical corps.

The converse sequence of events, namely Parkinson's disease following Alzheimer's presenile dementia seems to be extremely rare, possibly because patients suffering from Alzheimer's disease are especially prone to be stricken with pneumonia. Hence, the institutional survival period of these persons has been not more than two to five years as a rule. Only a small number of patients whose financial status has permitted exceptional nursing care have lived over a period of 10 or more years. This may be the reason that there is apparently only one case of Alzheimer's disease on record with an accompanying mild Parkinson syndrome (Rothschild and Kasanin 1936). This experience corroborated the earlier statement of Herz and Fuenfgeld (1928) to the effect that the "literature contains only sporadic data concerning involvement of the basal ganglia in Alzheimer's disease."

The following singular observation was made in a case of Alzheimer's disease progressing over the stage of decortication to that of a diencephalic organism. Expert care enabled the patient to keep alive in the latter state for five more years.

Case Report

Mrs. A. L. was in good health until 1887 when she was 26 years old and had a manic episode while on a European trip. She had to be confined to an institution in England. In 1898, when she was 37, she was thrown from a carriage and suffered a head injury. Following this accident she complained of pain in the head and back and gradually developed a mental disability. She blamed herself for the death of her mother who had been killed instantly in the same accident. Her depression progressed to a melancholia with delusions of personal unworthiness and guilt. She remained in bed for three years under constant medical and nursing care. During this time, she attempted repeatedly to commit suicide by slashing wrists, ankles and throat. Terrific headaches accompanied the whole period of invalidism. In 1901, she began to improve and regained, finally, her previous health. Three years later, the patient relapsed following the death of her father from cancer after a long and trying illness. This time, she was hospitalized for eight months. This attack of depression again was accompanied by constant complaints of pain in the back of her head.

From 1905 to 1928, A. L. was in good health except for frequent headaches. In 1928, the sixty-seventh year of her life, her memory and orientation rapidly began to fail, and she became so confused that she had to be hospitalized until her death in 1941 in her eightieth year. During these 13 years, she became less and less able to care for herself and to perform the usual tasks of life such as bathing, feeding and dressing herself. She became incontinent. Paraphasia was followed first by motor, then by sensory aphasia, later by apraxia, agnosia and finally, blindness. In addition, she developed a most intensive rigidity of her extremities, accompanied by tremor and resulting in contractures of the arms in flexion, of the legs in extension. Frequent convulsive attacks were observed. They began with a tonic opisthotonic phase and were followed by clonic movements. During the last three years of her life, she was more or less in a state of decerebrate rigidity and gave no evidence in her behavior pattern that she was a human being.

Necropsy showed an extremely atrophic brain. It weighed 870 g. and was hard to palpation. The anterior half (Figure 1), to and including the posterior central convolutions, was covered by the thickened, milky arachnoid spanning the wide gaps between the atrophic gyri. Both prefrontal sulci were especially wide. The blood vessels of the circular arteriosus of Willis showed a few yellow plaques but were in general remarkably thin and free from arteriosclerosis. The same was true concerning the cortical vessels. Cross-sections through the brain (Figure 2) revealed a considerable hydrocephalus of the lateral ventricles, the right more than the left, and moderate enlargement of the third ventricle with shrinkage of cortex, basal ganglia and optic thalami. Both gray and white matter of the right hemisphere together measured in some places not fully one centimeter. The corpus callosum in parts was not thicker than one millimeter. Reduction of the left temporal lobe by 30 per cent was easily visible.

The microscopic picture of the *left temporal lobe* confirmed this impression. The cortical convolutions were considerably narrowed, the sulci widened and filled with proliferated arachnoid. The white matter showed severe demyelination with preserved Z-fibres. The lower horn of the lateral ventricle was enlarged.

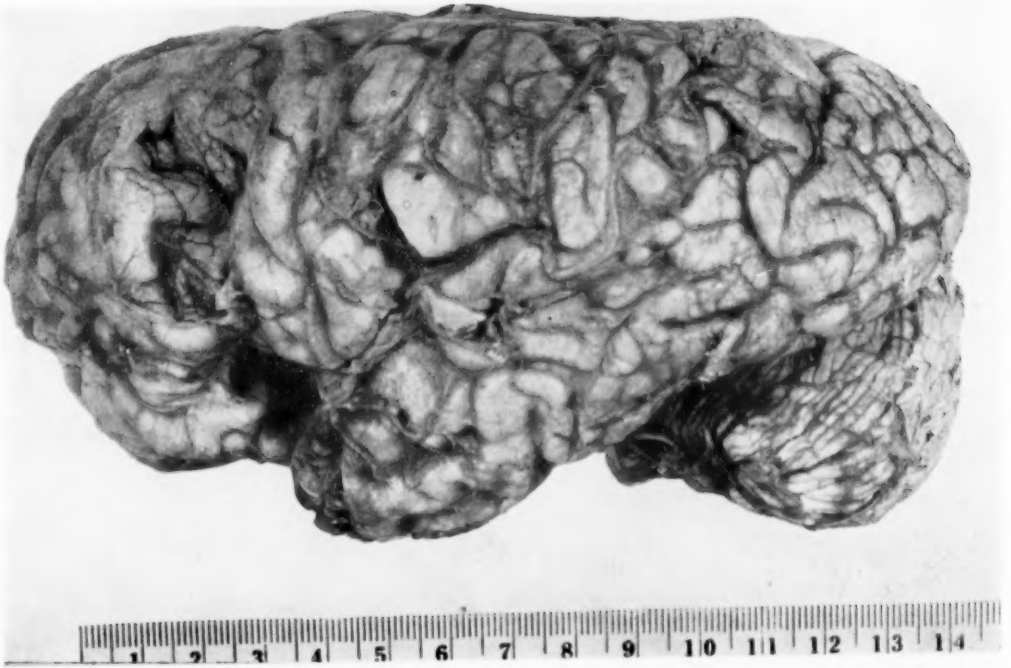

Figure 1. Lateral view of the left cerebral hemisphere showing the atrophy of frontal, central and temporal convolutions and the widened sulci covered by the arachnoid, especially in the region of the operculum.

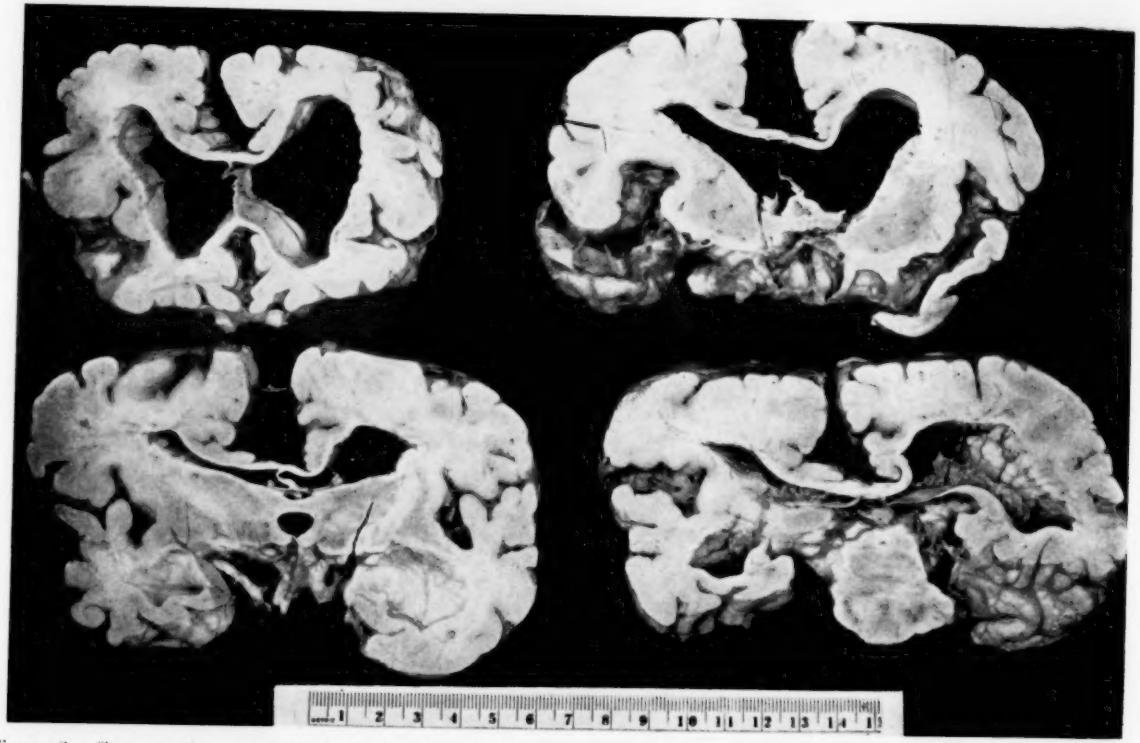

Figure 2. Cross sections through the brain showing the enormous bilateral internal hydrocephalus with special atrophy of the left temporal and frontal lobes, the caudate nuclei and the optic thalamus.

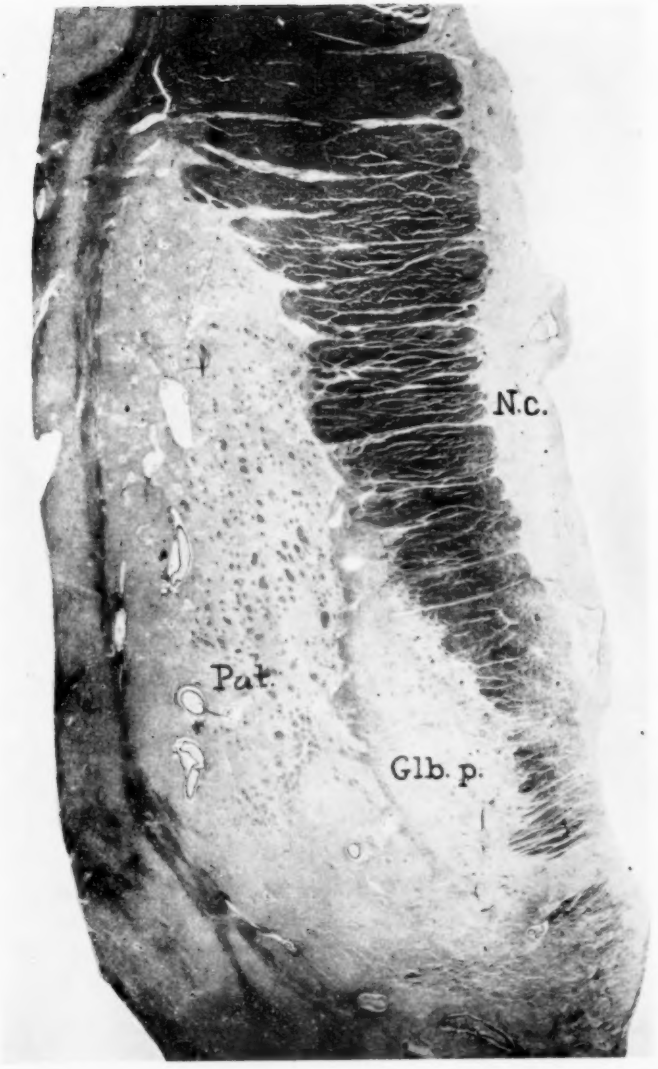

Figure 3. There is complete atrophy of the caudate nucleus (N. c.) and considerable shrinking of the putamen (Put) and globus pallidus (Glb. p.). There are numerous senile plaques in the putamen, and considerable loss of nerve cells with subsequent growth of fibrous glia in the pallidum. (Phophor Tungstic Acid. 5 x.)

The frontal lobes were most severely affected. The cortex was very small and no architecture was recognizable. Scattered nerve cells were found in the pyramidal layer, shrunken, stuffed with lipoid granules and sometimes with opaque cytoplasm. The ground tissue had a spongy character, and large fibrous astrocytes were distributed in varying density all over the cortex.

The *central region, temporal lobes, Ammon's horn* and, especially, the *calcarina cortex* revealed the nature of the process. In all these parts, the cortical architecture was more or less intact, but the layers were void of nerve cells with the exception of certain islands. The large pyramidal cells were more diseased than the small ones. The upper pyramidal layer was better preserved than the deep layers. The majority of the surviving nerve cells demonstrated clumping and argyrophilia of the neurofibrils with skein and basket formation. The entire depth of the cortex was strewn with senile plaques. In one field reproduced, 80 senile plaques were counted. This is next to the maximum found in a corresponding area of the cortex in the severest senile dementia.

The *basal ganglia* (Figure 3) had lost their configuration and architecture. The head of the corpus striatum had completely disappeared, the characteristic stripes of the putamen were missing as was the lamina medullaris of the globus pallidus and the ansa lenticularis. A great number of the large nerve cells of putamen and globus pallidus were lost or in full fatty degeneration. Groups of fibrous astrocytes replaced the diseased parenchyma. A few senile plaques were found in the putamen, a greater number in the basal nucleus, the cells of which showed the signs of fibrillary changes. The periventricular area and the tuber cinereum were void of nervous elements. A dense glia scar marked these areas, and the floor of the third ventricle was reduced to a paper-thin membrane. Serial sections through the level of the red nucleus, examined because of the presence of decerebrate rigidity, showed a severe atrophy of the ventral and lateral thalamic nuclei, a slight degeneration in the cells of the substania nigra, but a normal condition of the red nuclei and the area surrounding them.

To summarize: A woman of 37 developed after a head injury a severe depression of three years duration, during which she complained of considerable headache. After an interval of three

years, another depression of eight months duration followed. Thereafter, she was in good health for 13 years. At the age of 67, she experienced rapid loss of memory and intellect as well as of orientation. She was institutionalized and remained so until her death in her eightieth year. During this time she became aphasic, apractic and agnosic. She developed tremor, extensive rigidity and contractures in arms and legs such as frequently are seen in paralysis agitans. She was in a state of decerebrate rigidity for the last three years of her life. The necropsy showed an almost complete obliteration of the cortex with numerous senile plaques and fibrillary changes in the ganglion cells and a similar process in basal ganglia and nucleus, and severe atrophy of the optic thalamus.

Discussion

Kraepelin designated the disease that he called Alzheimer's disease as a presenile dementia. Nobody will object to this name when dealing with patients in their fourth or fifth decade of life. However, two of the four classical patients of Perusini were in their sixties when the disease became manifest. This is, of course, no indication of what the age is at which senility begins. Going over the literature, one cannot avoid the impression that, in separating Alzheimer's disease from senile dementia, factors other than age have been decisive. There was, to begin with, the rapid progress into, and the degree of, the eventual loss of memory, intellect and orientation. There followed, the focal cortical signs such as agnosia and apraxia. There was, finally, the histological picture of the cortex, with the severe loss of nerve cells, the appearance of fibrillary changes in those preserved, and an abundance of plaques almost unknown in simple senile dementia. It is generally accepted today that this entire clinico-pathological syndrome represents Alzheimer's disease, independent of the precise age of life in which the disease first becomes manifest. This definition once accepted, the present patient is part of this group, although the signs of the disease proper were not observed until her sixty-seventh year.

The manic phase in the patient's disease, preceding head injury and depression, precludes the assumption that she may be part of a group of patients in which Alzheimer's disease was ushered in

by emotional disorders. Herz, and Fuenfgeld's case began with a depression. Rothschild and Kasanin report corresponding observations (their Cases 7 and 5), the one of a woman who several months after a mamma amputation because of cancer at the age of 46 slipped into a depression which gradually changed to restlessness, confusion and delusions of persecution. She died at the age of 50 with the clinico-pathological signs of Alzheimer's disease. The other patient, also a woman, at the age of 40, during her involution, was depressed for a while after the death of relatives. She became increasingly confused and died of Alzheimer's disease 22 years later. There remains a difference between the duration of the final phase in the present writers' patient and those reported in literature. The usual duration of the last period of Alzheimer's disease is from two to eight years. The present patient lived 13 years in deep dementia, the last three as a subcortical being.

A very unusual sign in the present case was the type of locomotor disturbance. While motor restlessness is considered one of the common characteristic signs of Alzheimer's disease, a Parkinson syndrome prevailed in this patient, with typical extrapyramidal contractures and eventually a posture resembling decerebrate rigidity. The rarity with which extrapyramidal features accompany Alzheimer's disease may be judged from Rothschild's and Kasanin's remarks that Kasanin and Crank's case represents the only one of its kind on record, although, in that patient, attitude, hypertonus and loss of associate movements were the only signs suggestive of Parkinson's syndrome. Slight muscular hypertonus has repeatedly been referred to as senile rigidity during Alzheimer's disease in the German literature, as well as by Malamud and Lowenburg. These authors found severe changes in the putamen in their case but neither senile plaques nor fibrillary changes, whereas Kasanin and Crank described plaques in basal ganglia and optic thalamus. Pathological changes in, and atrophy of, corpus striatum, globus pallidus and basal nucleus of the present writers' case including plaques and fibrillary changes—underpreservation of the substantia nigra and red nuclei—were quite severe enough to explain the presence of the Parkinson syndrome.

Severe disease of the large nerve cells of the corpus striatum, basal nucleus and optic thalamus, apparently caused by senile

fibrillary changes, was found by Herz and Fuenfgeld in their three cases, none of whom had shown rigidity. All of them had suffered from the pronounced motor restlessness that is characteristic of many patients with Alzheimer's disease. It is still an open question as to whether this locomotor behavior is part of the choreatic-athetotic syndrome in which pathological changes of the basal ganglia are usually found.

The atrophy and gliosis of walls and floor of the third ventricle corresponded in severity approximately to the degree previously found in a man of 103 years of age whose mentality was still quite active (F. H. Lewey, 1925).

Summary

A patient is described, with Alzheimer's disease differing in its course from the general rule, that is in its long duration—43 years, if two periods of depression with severe headaches should be considered part of the final disease, otherwise 13 years. The patient developed a marked Parkinson syndrome with contractures of arms and legs. During the last three years of physical life, she was in a state of decerebrate rigidity and gave no evidence in behavior of being a human being.

Necropsy revealed severe atrophy of the brain with enormous hydrocephalus and lobar atrophy. Senile plaques were abundant all over the cortex. The majority of nerve cells had disappeared, and those preserved showed senile fibrillary changes. The basal ganglia were in the same state of atrophy. Senile plaques and fibrillary changes were present in the corpus striatum and basal nucleus, while the cells of the globus pallidus were in a state of fatty degeneration.

Paralysis agitans, the subcortical variant of Alzheimer's disease, is frequently followed by the cortical form. The reverse sequence as evidenced by the present patient, is a great rarity, in fact seems not to be on record previously except but once in a mild form. The same observation is true in the case of the severe senile atrophy of the basal ganglia in Alzheimer's disease.

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A SCHIZOPHRENIC REACTION FOLLOWING CESSATION OF A CHRONIC CONVULSIVE STATE

BY J. NOTKIN, M. D.

The occasional occurrence of convulsions during the course of schizophrenia is known,[1] although the infrequency of this combination has led some investigators in recent years to the rather unwarranted assumption of the existence of a biologic incompatibility between these two disorders, a theory which was advanced by von Meduna as the basis of the convulsive therapy of schizophrenia..[2]

The writer wishes in the following report, to present a case in which a convulsive state was apparently the predominant manifestation for a period of over 20 years, and then was replaced after a free interval of eight years by a classical schizophrenic reaction. Such an occurrence, to the present writer's knowledge, has not been recorded previously in the literature.

Z., at the time of his admission to Hudson River State Hospital in 1942, was 39 years old. He is descended from Anglo-Saxon stock. His paternal grandfather was a prominent politician, while the maternal grandfather was an astronomer of note. The father is living and is a well-adjusted individual but has been suffering from deafness for many years. The mother was an active woman. She has suffered two slight strokes in recent years and had a "nervous breakdown" when the present patient was one year old. There are five siblings, all of whom except one are well adjusted and are successful in various professional fields. Z. is the youngest of the group. He was born when his mother was about 41 years old. He was a sickly infant and a feeding problem. He was brought up under strict religious training, and it must be noted that the parental attitude in rearing the children was rather rigid. He had the usual childhood diseases. His hearing acuity began to diminish early in infancy. At the age of nine, he became subject to frequent petit mal and grand mal attacks which kept him from normal schooling and from other activities of childhood. Intensive treatment had little effect on the frequency of the attacks. Formal schooling had to be discontinued at the age of 11, and the boy was then privately tutored at home. He grew up to be a seclusive,

shy and irritable boy. There appeared to be no sexual drives, and no autoerotic practices have been observed. At the age of 17 he was taken to a Dr. X, a well-known psychoanalyst. As a result of the frequent interviews a marked positive transference was established, and the patient seemed better adjusted. The convulsive seizures diminished somewhat in frequency and stopped in 1934 when the patient was 31 years old. It must, however, be noted that the patient received phenobarbital daily, even after the convulsions ceased. Z. himself informed the writer that from 1929, or thereabouts, he himself had increased the usual daily dose of a grain and one-half to 10 and one-half for a period of several years. He discontinued phenobarbital entirely about 1939 and, surprisingly enough, had no ill effects. The interviews with the psychoanalyst had been terminated in 1932. Z. remained shy, seclusive and uninterested in social activities. However, he displayed no abnormal tendencies for a period of almost eight subsequent years except for a violent quarrel—which included a physical fight with his brother—in 1935.

Early during 1940, Z. began to charge that everything which had happened to him or would happen to him had been preordained by Dr. X. For the first time, he became aware of some sex urge and began to masturbate. In the meantime, his hearing became progressively worse. During the early part of 1942, he declared that Dr. X. had told him that he was ordained to impregnate women. He felt that he should impregnate the wife of his brother, since the couple had been without children. He developed the idea that he couldn't find work outside his home, because his brother might find work in the same establishment and in turn attempt to influence him. He became very involved in his thinking. On May 10, 1942, he was taken to a private mental hospital. There he was found to be a slim, asthenic individual. He had an accessory nipple low down on the left side and a rudimentary nipple on the right side. His hearing was quite reduced, and he had to use a hearing aid. The electrocardiogram showed sinus arrhythmia, while the electroencephalogram revealed a normal tracing.

The day after admission to the hospital, the patient was seen to be walking about with an anxious and somewhat perplexed expression. However, he was cordial, amenable and interested in the in-

terview with his physician. His productions were dissociated, incoherent and scattered. There was an abrupt change of topics, and it often appeared to be with apparent difficulty that he answered questions relevantly and logically. He expressed a number of bizarre, delusional ideas with a strong sexual coloring and with the element of grandiosity. He claimed that it was incumbent upon him to impregnate his sister-in-law. He thought that unless he was able to have sexual intercourse the present World War would continue unabated. He continually referred to Dr. X. as prognosticating everything which was going on and which would happen in the future.

Various psychometric examinations rated Z. as at least normal. The revised Stanford-Binet Test gave him an I. Q. of 102 and the Bellevue Intelligence Scale 109.

On August 6, 1942, Z. was transferred to Hudson River State Hospital. There, his trend became more florid and more bizarre. He involved, in his delusional formation, current events in the most fantastic manner. He asserted, for example that if he did not beget a child before the Germans got to the Volga they would have half of the river after the war. If, however, he had sexual relations with a nurse first, Germany would own Leningrad, and Archangel would be the only city left to Russia. If this happened, he reasoned, it would make the Russians very angry and lead them to attack Alaska. He once saw a carpenter on the ward making repairs and drew the conclusion that this was "a sign of eternity," a sign from the public that people were waiting for him and expecting him to have a child. He said that he had to wear a black suit one week as a sign that he kept faith with the sailors and a Panama hat as a sign to the British sailors that he possessed honesty and integrity. All this was expressed in a matter-of-fact fashion without any emotional modulation.

It is quite obvious that the present reaction is schizophrenic in nature and can hardly be considered as what is commonly known as an epileptic psychosis. In fact, it is rather astonishing that the patient shows no "epileptic deterioration" after having been subject to convulsive attacks since his early childhood. Neither does he show any of the other manifestations which have become time-honored signs of epilepsy, such as the plateau type of voice, the

slowing down of production, the adhesiveness, or clinging, to people. On the other hand the dissociation in his thinking processes, the incoherence and scattering, the emotional flatness and the bizarre symbolic thinking are all evidences of schizophrenia.

The question then arises as to whether the two processes were coexistent from his early youth. This is rather difficult to answer, as—except for shyness, reservation and asocial tendencies in general—there were no definite schizoid elements noted by his parents and siblings. While these tendencies could be considered as the precursors of a future schizophrenic reaction, they might have expressed the attitude of a handicapped youth who was subject to frequent convulsive attacks which had put him apart from his siblings and other children of his age.

The matter of the sudden cessation of the attacks is not entirely clear. It could, of course, have been due to the psychotherapeutic efforts of the psychoanalyst. The attacks also could have ceased spontaneously, as occasionally happens in epileptics; and, finally, the massive doses of phenobarbital the patient had been taking for a period of years could have had a lasting therapeutic effect. The most remarkable thing in this case is the subsequent development of the schizophrenic process with its bizarre delusional trend, a clinical evolution which is difficult to explain. The theory of the so-called biologic incompatibility working in reverse, the schizophrenic reaction having a therapeutic effect on the convulsive disorder, can hardly be offered as a possible explanation. Is it possible that Z. exchanged one form of adjustment (convulsions) for another (schizophrenia) to give more freedom to his primitive drives?

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ON THE DISEASE-ENTITY BOREDOM ("ALYSOSIS") AND ITS PSYCHOPATHOLOGY

BY EDMUND BERGLER, M. D.

I. Prevailing Conceptions and Explanations of Boredom

Casanova, on the basis of his own bitter experience in old age, called boredom that part of hell which Dante forgot to describe in "*La Divina Commedia.*" Boredom is a universal problem, constantly threatening the psychic balance of the individual. The danger is but seldom visible on the surface, in spite of those few individuals who consciously complain about the affliction of boredom. The majority of persons who suffer from boredom never complain about it, and its latent existence can be concluded only indirectly, from the strange and paradoxical splenetic-like actions of those afflicted with boredom in their efforts to avoid it. The constant longing for "fun" observable in many people is the inner protective defense against the constant danger of boredom.

Boredom consists of a feeling of emptiness and dissatisfaction and of the inability to concentrate on work or other endeavors which might give some kind of pleasure. What people understand by "pleasure" is, of course, as variable as their specific wishes, defense mechanisms, and neurotic reactions. Everyone has to find some specific remedy for the looming danger of the *sickness*, boredom, which varies quantitatively with the individual. No one can argue about the type of work or hobby a person prefers as an antidote. Between the stamp collector, the baseball enthusiast, and the gossiper—to mention at random three "hobbies"—are no connecting links of understanding. These are also different and specific attempts to avoid boredom, in addition to their functions in fulfilling specific unconscious wishes and defense mechanisms.

The opposite of boredom is the concentration of interest upon a specific field. Even in the most favorable circumstances, the intensity of this interest changes at times. Still, even the layman understands that the surgeon may feel a continued interest in his surgery, the historian in his middle ages, the ship captain in navigation. In general, however, people make a very precise distinction between work and "fun." The ideal situation is when work is

also "fun." Expressed scientifically, the more work serves for the sublimation of unconscious drives and defense mechanisms, the more pleasurable life is. Unfortunately, work for the majority is only some kind of hardship, necessary to provide an existence, but good for no other purpose.

The problem of extensive boredom has importance clinically, not only because it is painful and makes life empty, but also—and this is the most important reason—because it even drives people to suicide, since, as they express it, nothing "appeals" to them any more, and they are "through with everything." Boredom *per se*, of course, does not lead to suicide, but the neurotic reasons behind it do. Suicidal persons unconsciously turn their aggression upon themselves, chiefly because of unconscious feelings of guilt. In other words, as long as the balance of aggression in the personality is fair, there is no danger of suicide. Persons with stable sublimations are practically immune from suicide. Shaky sublimations are, as is pointed out later, one of the three indispensable prerequisites of boredom. The writer personally believes that the majority of neurotic suicides could be prevented by analyzing the unconscious reasons and thereby changing them. "Harmless" boredom is sometimes a danger signal, warning of some fundamental flaw in the inner equilibrium.

The popular explanation of boredom is the following. Certain individuals have certain "predilections," and if these predilections are frustrated, boredom results. Another widely accepted explanation of boredom is that it is the result of monotony and repetition. Both popular attempts to clarify the phenomenon fail to contribute any specific explanation. First of all, "predilections" must be explained genetically and not taken for granted. They, too, have reasons for being. Second, it is not true that monotony and boredom are identical. The surgeon can operate every day for 40 years without becoming bored with surgery; the sailor is not bored with his ship; the driver with his car, except, perhaps, in transitory spells. Of course, in these cases, we are speaking of endeavors chosen and not forced upon a person. In other words, the more that unconscious wishes and defenses are smuggled into work, the less is the danger of boredom.

One encounters boredom either as one of many symptoms in neurotics* of all types or as a disease entity in itself ("alysosis," etymologically from "alys," Greek for "boredom"), or as a transitory phase in not too neurotic persons, who are sometimes euphemistically called "normal." The writer believes that in certain neurotic cases boredom is a pathologic entity, and proposes to speak about the disease, boredom. It will be necessary to find a genetic place for that old but neglected disease.

The riddle of boredom has proved provocative to some scientific observers, psychologists, philosophers, and even physicians. For instance, the best known and often-quoted explanation of boredom is that of Lipps,[1] who regards it as a feeling of inner emptiness. "Boredom is a feeling of displeasure stemming from the fight between the need for intensive psychic action and the lack of interest or the inability to be interested. Hand in hand, goes lack of concentration." Nietzsche[2] acknowledges that boredom presupposes a higher level of psychic development: "The expression, 'The Magyar is too lazy to be bored,' is indicative. Only the highest animals are capable of boredom. . . . A plot for a great poet would be God's boredom on the seventh day of creation."

The objection to Lipps' definition is its purely descriptive content. It scrupulously avoids any attempt at explanation. The same objection applies to Nietzsche's statement, which simply specifies that "primitive" people are not bored. The cause of boredom is not even discussed.

There have been up to the present three serious psychoanalytic attempts to understand the problem of boredom, the papers of v. Winterstein, Fenichel and Spitz. Winterstein[3] believes that boredom is felt when the psyche has a hypercathexis of narcissism and attempts unsuccessfully to find object-libidinal or destructive aims. He surmises that there are two types of bored persons, the pleasure-type and the duty-type. Individuals of the first sort, of whom he considers Baudelaire an example, are blasé and yet incapable of pleasure. Those of the second sort, as examples of which he mentions Fechner and Darwin, flee into work, since they are bored with anything else. People of both types are incapable of love, have not reached the genital level, and have regressed to

*The writer purposely excludes the subject of psychotic boredom from this paper.

the anal-sadistic level of development. Winterstein holds, furthermore, that some bored persons are slightly depersonalized, and believes that the symptom of boredom itself has perhaps a physiologic basis.

Fenichel[4] formulates the neurotic unconscious mechanism in boredom as follows: "I am excited. If I permit further increase of excitement, I shall be frightened. Therefore, I am saying to myself: 'I am not excited at all; I don't want to do anything.' Since I have forgotten my original aim, I don't know what to do. The outer world must do something which will free me from my tension and at the same time not make me frightened. The outer world must make me act; then I am not personally responsible. The outer world must distract me so that whatever I do I shall be far enough from my original aim. The outer world should do the impossible—it should give me release from tension without making me actively use the drive." Fenichel, like Winterstein, believes that bored persons of some types suffer from a variant of depersonalization. Basically, behind boredom are "tensions stemming from drives which, despite the repressed aim, are taken cognizance of but are inwardly negated." Fenichel believes that some types of boredom have an oral substructure, since so many persons use eating, drinking, and smoking to counterbalance their boredom. This author stresses the fact that there are two types of bored people, who behave phenomenologically differently. Those of one type are fidgety and motorically agitated; those of the other type are without motoric impulses and wish to be distracted by the outer world. He admits his inability to explain the genetic origin of these two types.

Spitz[5] stresses the phenomenological fact that children at the ages of one and two show a marked predilection for repetition, which lasts until they are about six, when that tendency disappears. Later, the adult produces, with but few exceptions, a distaste for repetition. The early predilection for repetition represents a measure to save the child from anxiety (everything new is frightening). In wanting to listen to the same fairy tale over and over, and even insisting on the use of the same words when that tale is related to him, the child is attempting to master anxiety. The age of six is the turning point, because at that age the Oedipus complex is de-

stroyed, and with the prohibition of Oedipal fantasies by the newly-established, severe, unconscious conscience (super-ego), comes also the prohibition of repetition, which takes such an important place in masturbation and pregenital fantasies.

The present writer's objections to the conclusions reached by these three authors are the following. He does not believe that boredom ensues when the narcissistically overcathected psyche cannot find object-libidinal or destructive aims, as Winterstein holds. Against that assumption, speaks the fact that in the very cases in which the psychic apparatus shows high narcissistic cathexis, as in individuals indulging in fantasies, boredom does not develop. The writer, however, agrees with the other formulation of Winterstein, that the bored person is incapable of finding libidinal or destrudo aims; but questions as to why that inability exists remains unanswered. Fenichel's formulation, characterizing boredom as "tensions stemming from drives which, despite the repressed aim, are taken cognizance of but are inwardly denied (negated)," leaves unanswered the question as to why every neurotic is not bored. In all neuroses, the drive causing the disturbance is repressed; tension, however, is present, manifesting itself in dissatisfaction and depression. The mechanism of inner denial and negation, assumed by Fenichel as pathognomonic for boredom, is ubiquitous in neurosis and does not give a clue to boredom specifically. The writer doubts, further, Winterstein's and Fenichel's assumption that boredom is close to depersonalization. He believes quite the contrary. Depersonalized persons are not bored at all; they spend their time complaining and comparing painfully their present "dead" feelings to the "good old times" before the onsets of their diseases. They could not be bored because they are constantly observing their symptoms, using a great deal of voyeurism in that introspection—a fact pointed out in a paper by the author in collaboration with L. Eidelberg.[6] Moreover, the writer cannot subscribe to Fenichel's idea of oral regression in boredom. True—bored persons use eating, smoking, and drinking as antidotes for boredom; but, once more, Fenichel uses an ubiquitous mechanism unsuccessfully to explain something specific. In a dangerous situation, all persons make use of transitory regression and utilize old channels and ways of reassurance. The oral reassurance is one of

the first experiences of life. The most important part of Fenichel's paper seems to the writer to be his descriptive distinction between the "fidgety," motoric type and the inactive type of boredom. Despite his inability to explain the reason for the difference in types, his descriptive differentiation of the two is undoubtedly of merit.

The present writer has no objection to Spitz' paper, as far as it goes; but he believes that it stresses the superficial layers of a more involved problem.

II. A Triad of Prerequisites of Pathologic Boredom

Boredom as a disease is always associated with three disturbances: (1) weak or shattering sublimations; (2) inner inhibition of voyeurism, (the "Peeping Tom" characteristic, scopophilia); and (3) defense against masochistic pleasure.

Let us first clarify the issues of that triad.

1

Sublimation signifies, according to Freud, who coined the phrase and gave it scientific meaning, the unconscious transformation of an originally pregenital or phallic drive into something socially accepted, after thorough de-sexualization. The typical example is the exceptionally sadistic child who later becomes a surgeon, a nurse, a hospital attendant or a butcher "according to his opportunities and abilities" (Jones). How these early drives are transformed has never been clarified in psychoanalysis. Experience has shown that neurotics have weak or unstable sublimations and that cured neurotics are capable of building up workable sublimations. There is considerable divergence of opinion in analytic literature about the basis of sublimation. Freud even assumed once or twice that a biologic basis was involved. To make matters more complicated, some authors—for instance, Roheim—believe that sublimation is the result of the wresting of id-ground (unconscious wishes) from the super-ego (unconscious conscience), while others believe exactly the opposite, that sublimation represents the warding-off of unconscious wishes under the pressure of the super-ego. Furthermore, there is no uniformity of opinion about the number of layers involved. Some believe that the process involves a direct transformation with de-sexualization, though they admit ignorance of how

this is done; others assume a more complicated structure, for instance, Jones. In his paper on Morphy, the chess player (Int. J. Psychoan., 1931), Jones expresses the view that sublimation has a protective function and a two-layer structure: "I conceive that Morphy's parricidal impulses were bound by an erotic cathexis . . .and that this in turn was sublimated." In other words, sublimation is still an unsolved riddle, even analytically.

The present writer has expressed his personal belief[1] that sublimation has a five-layer structure and that sublimation does not represent the direct though de-sexualized id-wish, nor the defense against it, but rather the defense against the defense against an inner conflict. Sublimation is therefore not the child, but the modified grandchild, so to speak, of the original conflict. The writer believes furthermore, that the great mystery as to what happens with aggressive drives in sublimation—since clinical experience has proved so often that pregenital sexual wishes are the material for sublimation—can be explained on the assumption that that aggression is spent in fighting the super-ego. The writer believes, as well, that a complicated mechanism of irony and spiteful defiance of the ego against the super-ego is visible in sublimation.

The reason for the appearance of pregenital wishes (oral, anal, urethral, voyeuristic, exhibitionistic) in sublimation rather than of aggressive tendencies is that the latter may find expression elsewhere more easily than the libidinal ones, especially the pregenital ones. As far as these pregenital wishes can progress to be subordinated later under the "primacy of genitality," all goes well. But even in the most favorable circumstances, there are remnants of pregenital wishes, and these are the material for sublimation. Therefore, we have a preponderance of pregenital conflicts in sublimation. The aggression, on the other hand, is used to a great degree to ward off constantly the super-ego and to fight the "realities of life," so that there is simply less aggressive energy unresolved. The writer believes that the amount of aggression need to fight the inner conscience is underestimated, even in "normal" conditions.

One must be reconciled to the strange fact that the material for the highest mental, cultural, and artistic functions has its affective basis, not only in childlike drives, but in the more fantastic and grotesque of these—the pregenital ones.

For an example, a patient, a scientist, awaited with impatience and excitement the publication of his papers in different scientific journals. Whether one of his papers would appear, whether he would be praised or criticized seemed to be decisive factors in his life. Everything else, work, love, hobbies, were subordinated to that publication-compulsion. But when the papers were published, he lost all of his former interest after a very short time and began to ask when his next paper would be published "at last" and to complain bitterly about alleged neglect. He also reacted paradoxically to being quoted. If he was quoted unfavorably or passed over, his aggression, always ready to break out, revelled in orgies of hatred, whereas he took practically no interest in being quoted favorably except for a passing, conscious narcissistic one. He was a typical example of the "mechanism of orality," which the writer has often described.[5] Such neurotics habitually push persons of the outer world, who are unconsciously identified with the pre-Oedipal mother, into situations of refusal, so that they may be aggressive afterward, seemingly in self-defense. They repress the fact that they themselves have provoked the refusal and enjoy masochistically the situation, "Nobody loves me." The whole triad is unconscious; only the feelings of righteous indignation and self-pity are conscious; and even these are felt without understanding of the masochistic factor involved.

The reason for the patient's publication-mania was to be found in his voyeurism. Since that voyeuristic drive was connected with his mother, it was strongly counteracted by his inner conscience. Therefore he furnished the defense mechanism: "I am not a Peeping Tom; I exhibit." To publish scientific papers, meant for him unconsciously an exquisite exhibitionistic defense. His sublimation was built on the following layers:

First layer: "I want to be a voyeur" (libidinal).

Second layer: First reproach of the inner conscience: "You have no right to peep at your mother."

Third layer: "I am not a voyeur; I am an exhibitionist. I don't need my mother; I am showing my own body. I am autarchic and aggressive in transgressing educational rules."

Fourth layer: Second reproach of the inner conscience: "You have no right to be aggressive in using exhibitionism, either."

Fifth layer: "I am neither aggressive nor exhibitionistic. I want to be obedient and a good boy. I shall publish papers and work for humanity. Didn't my father (mother) tell me to be socially-minded?" (Irony at the expense of education.)

Only the fifth layer leads to sublimation and contains an element of outwitting of the conscience.

In cases of unsuccessful sublimation, the ego loses the "battle of sublimation;" in other words, the aggression is used, not by the ego to fight the inner conscience, but by the conscience to fight the ego. Psychic masochism is the result.

In instances in which only weak or unstable sublimations are built, boredom represents the defense of the unconscious ego against the intermediary phase of an attack stemming from the super-ego. That attack always comes after external defeats and shakes the basis of sublimation. The super-ego misuses defeats in reality for its purposes of torment, and its attack is not powerful enough to destroy the sublimation but is powerful enough to make it unworkable for some time. The interim, in which the sublimation is unworkable, is visible on the surface only in the unconscious ego-defense, boredom.

2

Besides having faulty sublimation, bored persons manifest a disturbance of voyeurism. The scopophiliac instinct, comprising psychic voyeurism and psychic exhibitionism seems to play a rôle of highest importance in the prevention of boredom. There are basically two ways of avoiding boredom: first, acts of sublimation, and, second, fantasy. Everyone indulges at certain times in fantasies; and if these fantasies do not interfere with action, they are good antidotes for boredom. The poet Heine was once asked how he spent a few days. "I gave audience to my fantasies,"* was his reply. Only when fantasy takes quantitatively so predominant a place that it becomes a substitute for normal action can one speak

*It is interesting to note that the rôle of fantasy (voyeurism) in boredom was intuitively known to Voltaire. In his "*Discours*" we find the following statement: "*Le secret d'ennuyer est celui de tout dire.*" ("The secret of boring is to tell all.") The unspoken part arouses curiosity, stimulates fantasy and imagination (psychic voyeurism) and thus prevents boredom.

of it as a neurotic sign—like the fantasies observable in neurotics. Imagining action in fantasy is a prerequisite for normal action. "Thinking is rehearsal of action" (Freud).

One is, therefore, prepared to expect that in persons having a neurotic inhibition of fantasy, that is, genetically, of voyeurism, boredom will appear more frequently than in others. This expectation is borne out by observable facts. The reason for the inhibition of voyeurism is to be found in its unconscious connection with pre-Oedipal and Oedipal fantasies.

3

The third prerequisite for pathologic boredom is the need of a defence against unconscious masochistic enjoyment of consciously-disturbing fantasies. There are three groups of neurotics in particular who are—in general—immune from boredom, obsessional neurotics, depersonalized persons, and hypochondriacs. Consciously, these patients are constantly worried; they are concentrating on their obssessions, disturbance of perception, and imaginary diseases, respectively. The reason that neurotics of these groups are troubled by boredom so seldom is that their voyeurism is undisturbed. Only infrequently, after prolonged torture, are they bored. That boredom is an unconscious defense against the reproach of their inner conscience that they enjoy their fantasies and defense mechanisms masochistically. To ward off that reproach, reactive boredom appears on the psychic surface. The same reactive symptom is present in a quantitatively higher degree in persons in whom boredom is not a transitory and infrequent symptom but the central defense, that is, in "alysosis." In these persons sublimations and voyeurism especially are impaired.

Abortive reactions of the same sort are observable when one thinks too long about a problem without finding a solution. After a while one "gets bored." The inner conscience misuses the unsuccessful concentration of psychic energy for masochistic purposes, and the ego provides the defense of boredom, based on the formula, "I don't enjoy failure; I am bored." At the same time, the narcissistic ego denies the defeat felt in not finding the solution.

III. Specific Features of Boredom

One can understand the existence, correctly observed but not explained by Fenichel, of two types of reaction in boredom—the motoric, fidgety one and the immobile one—if one takes into account the following more or less generally-acknowledged fact in the psychopathology of neuroses: Every neurotic libidinal drive is inwardly warded off by aggressive tendencies; every neurotic aggressive tendency, by libidinal ones. Consequently, in the event that the conflict to be warded off consists of libidinal tendencies, it is fought by aggression, with the result that motoric acts appear on the psychic surface. The opposite is true when the conflict to be warded off is defense-aggression. In this event the reactive libidinal tendencies, directed against the person himself, result in absence of motoric action and impassivity.

Using that principle, it is possible to distinguish immediately, from the type of boredom, the underlying forces which are being warded off.

How can the fact be explained that bored persons so often want to be distracted by the outer world? The more superficial explanation is that they are incapable of finding something to amuse them in their own minds, and look for external amusement. In the writer's opinion, the reason is more complicated; he believes that behind that wish for external diversion are two child-like tendencies. One is the old childish megalomania, still placing the ego in the center of the universe, using the outer world simply as court-fool, good only for the purpose of providing amusement. The second is irony directed against the super-ego: "Let's see what you have to offer." Basically, the bored person does not want to be amused; he is simply trying all possible alibis to reduce the substitutes he employs to absurdity. Perhaps he is even continuing the old educational fight with his environment on a different basis; it is as if the educator forbade a certain type of pleasure, suggesting another one instead. That suggestion is ironically accepted, only to be reduced to absurdity.

Spitz' observation that the child insists on repetition, wanting, for instance, not only to hear the same fairy tale over and over but to hear it in the very same words, is correct. This repetition represents, however, not only reassurance against fright, as Spitz be-

lieves, but also a misuse of the outer world (represented, for instance, by the person telling the fairy tale) for purposes of childlike megalomania. In other words, a reversal of the real situation takes place. In reality, the child depends on the kindness of another person; but in the reversal he is omnipotent, making the other person simply an instrument of his own megalomania. Therefore, in insisting on the same story in identical words, he is giving vent to his narcissism.

IV. Reasons for Recognition of Boredom as a Disease-Entity

Boredom is encountered as a transitory symptom in many neuroses on an oral, anal, or phallic level when disturbances of voyeurism and sublimation are also present. One can compare boredom in certain respects to depersonalization. Both may appear as transitory symptoms in different neuroses. But, as with depersonalization, the fact that boredom may appear as a transitory symptom in some instances does not prevent its existence as a disease in itself in other instances.

Another reason for acknowledgment of boredom as a disease-entity is that the symptom and sign of boredom are the central features in specific instances, and not simply one symptom more in a long list of complaints.

Some persons are not satisfied until they find a complicated name for a disease. "Boredom" pure and simple does not seem to be a disease at all to them. Perhaps they will accept it as a disease if we call it "alysosis," using the Greek word "alys" which means boredom. Those who prefer Latin terminology may call it "otiumosis" (otium=boredom).

The great difficulty of the genetic position of the old-new "disease boredom" is based on the fact that, up to now, psychoanalysts have subdivided neuroses genetically into three groups, according to the point of regression or fixation—oral, anal (e. g. obsessional neurosis) and phallic (e. g. hysteria). Since scopophilia has been, up to now, a step-child, it has not received enough attention, even from the viewpoint of genetic classification. One is faced with the same difficulty in classifying two other scopophiliac diseases, depersonalization and erythrophobia (blushing). However, the classification of these two diseases is made somewhat easier by the

facts that blushing is related to oral tendencies, depersonalization to anal ones. Some classificatory uncertainty is still present with regard to these, however. For instance, blushing is often classed as a "narcissistic embarrassment neurosis" (*narzisstische Befangenheitsneurose*), and the exhibitionistic-voyeuristic tendencies are simply added to it. But the present writer believes that one could turn the tables and group all three diseases, depersonalization, erythrophobia, and alysosis under the heading of "scopophiliac diseases," pointing out how they are interrelated with other libidinal and aggressive elements. Scopophilia seems to be something different from the generally accepted groups, and is difficult to handle, not only from the clinical and therapeutic standpoint, but also from that of classification.*

Conclusions

Boredom is a neurotic disease closely associated, in a triad of disturbances in the sphere of sublimation, with scopophilia (voyeurism), and psychic masochism. It represents an unsuccessful defense mechanism of the unconscious ego against reproaches of the inner conscience.

*The following table presents a comparison of the two known "scopophiliac" diseases:

	Depersonalization	*Erythrophobia*
Id-wish.	"I want to exhibit anally."	"I want to be a voyeur of my mother's breast."
First defence of unconscious ego under pressure of super-ego.	"I want to be a voyeur of my own body."	"I want to exhibit my body (buttocks, cheeks, penis)."
Second defence of unconscious ego under pressure of super-ego.	"I am not a voyeur; I am observing my sickness. I don't enjoy that observation; I suffer."	"I don't exhibit; I am shy and want to cover myself. I don't enjoy that exhibition; I suffer."

In both diseases, one part of scopophilia is used as a defense against the other. In depersonalization, exhibitionism is warded off with voyeurism; in blushing, the opposite takes place. The difference between depersonalization and erythrophobia is, therefore, the sequence of scopophilia and defense events. In depersonalization, an anal exhibitionism is warded off by voyeuristic means; in erythrophobia, exactly the opposite happens—a voyeuristic wish is warded off with exhibitionism. In the third layer in both cases, the secondary defense goes one step further, making out of pleasure—pain. For details see the writer's paper: "The mechanism of depersonalization," (in collaboration with L. Eidelberg), l. c., and "A new approach to the therapy of erythrophobia," a paper read at the fifteenth International Psychoanalytic Convention, Paris, 1938, (Psychoan. Quart., 1944, Vol. XIII, No. 1.)

These reproaches are often more or less in the form of a "raid," and do not progress to a real offensive. In such cases, boredom represents only a transitory, though repeated phase, encountered in many neuroses in which, in addition to other difficulties, voyeurism is impaired.

Conclusions as to the underlying drives which boredom wards off are possible from its visible signs, whether the bored person is fidgety and motorically agitated or is without motoric impulses.

The prognosis is unfavorable in untreated cases, which may even result in suicide, since the disease is of a progressive type and never self-limited.

By solving the neurotic difficulties in the sphere of the "triad of boredom," cure is possible in psychoanalysis.

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PHENOMENAL SPURT OF MENTAL DEVELOPMENT IN A YOUNG CHILD

BY EUGENE W. MARTZ, M. D.

The development of intelligence throughout infancy and childhood continues to be a topic of endless investigation and discussion. This is especially true if the intellectual development is abnormal in one way or another. There is still a decided lack of agreement among authors on many basic concepts regarding mental growth and the various factors which may tend to influence it. Investigators are continually looking for reliable methods to improve intellectual ability or, at least, to permit the full utilization by each child of his potential mental capacity.

Acceleration of mental development, through improved health, changes in environmental factors or better methods of training, has been reported in many cases. A selected child, because of unusual circumstances, may show a substantial rise in I. Q.; but it does not follow that every child under similar circumstances will attain the same increase or any increase at all.

The following case is being presented not only because of the phenomenal mental development that occurred over a four-year period but also to impress upon others the necessity for continued research in this field. It is not a simple matter to explain why this child's I. Q. jumped some 68 points, while none of the others in the same group showed any appreciable change. To say that the child must first of all possess the inherent potentialities for improvement does not entirely suffice. No experimental or controlled situation was established in this case, no direct attempt was made to produce this remarkable change through an especially designed system or regimen. Briefly stated, it appears that when conditions became favorable, this child quickly attained her potential level of intelligence in spite of existing handicaps.

Case Report

Nancy was born out of wedlock when her mother was aged 26, the father, aged 39. During the first four months of pregnancy, the mother tried every method known to her in an effort to induce an abortion. The pregnancy, however, was uneventful and went to full term. In order to keep her secret, the mother used tightly

laced corsets. At term, she gave birth to a well-developed, eight-pound infant which was nursed for only three weeks before being placed in a boarding home. When Nancy was two months old, the mother became convinced that her baby was mentally defective. She was dull, stupid and listless.

As time passed, Nancy took no interest in her surroundings, showed no animation; did not learn to hold up her head, eat or creep as normal babies do in the early months. She did not understand anything that was said to her, made no effort to talk. The report continues: "Because the baby was of such low grade intelligence, it was hard to find a boarding mother who was willing to care for her." The mother was finally persuaded to put her baby in an institution; and, with that, she determined to put the child out of her mind and life.

At 19 months of age, Nancy was admitted to the babies' ward of Letchworth Village. Her weight was 27 pounds. She was a quiet, backward, indifferent baby who received routine care and attention. It was noted immediately that she had gonorrheal vaginitis, and three days later the laboratory also confirmed a diagnosis of bacillary dysentery. Bony development was strongly suggestive of early rickets, eruption of teeth was delayed. Indications were that Nancy had been neglected. She was still taking her food from a nursing bottle, could not eat from a spoon. It was necessary to assist her to a sitting position. She could remain sitting only a short time and would then fall over. Her chief form of amusement was banging her head against the bars of her crib. In addition to the medical conditions noted, Nancy also had ringworm of the scalp and Vincent's infection of the mouth. On the Kuhlmann-Anderson intelligence scale, this infant attained the following score: C. A. 21 mo., M. A. 6 mo., I. Q. 29.

At the age of 23 months (after four months in the institution) Nancy was completely weaned from the bottle and was eating well. She showed some interest in her environment, was sitting better but could not stand. The various infections had been brought under control, and the child was in better health but still weak, lacked energy and initiative. Habit training progressed very slowly. She had little, if any, control over elimination, wore diapers at all times.

At two and one-half years, Nancy weighed 29 pounds and was

still under medical treatment. She had better color, seemed much stronger. She could stand with support; and while she made no attempt to walk or talk, she could understand simple directions. It was still necessary for someone to feed her, although she would try to hold a spoon if urged.

At three and one-half years, Nancy weighed 31 pounds. She could walk a little, could say a few words, was interested in her surroundings. She could recognize the nurses who cared for her and would try to say their names. At this time, she was moved from the babies' ward to a cottage of small, infirm girls. The majority of children in this cottage were considered to be untrainable either because of very limited intelligence or because of pronounced physical handicaps. Nancy's mental development showed an almost immediate acceleration. She became quite interested in everything she saw and heard. She would try, in a primitive way, to play with other children, would smile at those she knew, and she wore a more alert expression.

At four and one-half years, Nancy was average for both height and weight (39 pounds). She understood everything that was said to her and could talk in short sentences of several words, although speech was still infantile, words imperfectly pronounced. Walking was satisfactory although weak arches still gave the child a degree of unsteadiness at times. On the old Stanford-Binet scale, she attained the score: C. A. 4-10; M. A. 2-8; I. Q. 55. On the new Terman-Binet form L, her I. Q. was 59.

At the age of five, Nancy's progress was so encouraging that she was placed in a cottage of brighter children so that she might be tried in a prekindergarten class. At five and one-half years the little girl played in a rather normal manner. She was restless, inquisitive, talkative. Her health was excellent. She could dress and undress herself, even lace and tie her own shoes. She was now completely tidy in her toilet habits both night and day. The Terman-Binet form L gave her the following score: C. A. 5-5; M. A. 4-1; I .Q. 75.

At six years of age, Nancy was outstanding (in a kindergarten class of mentally deficient children). Her score on the old Stanford-Binet was: C. A. 5-11; M. A. 5-8; I. Q. 97. On the Pintner-Patterson Scale, she did not do so well: C. A. 5-11; M. A. 4-6; I. Q.

76. Total motor coordination as well as special motor skills were disappointing. She was now both obedient and polite, took great interest in her appearance, was careful with her clothes and playthings, would share her possessions with others. She would ask innumerable questions in a normal manner, would assist less fortunate children in various ways such as dressing.

So far as could be observed, Nancy was essentially a normal child at this time. She was well developed and weighed 45 pounds. There was a degree of awkwardness in muscular coordination. Hand dominance had not been established; and, although she preferred to use her right hand, many things were done with the left. Her eyes were weak and glasses were prescribed. This child could print her full name and could print the entire alphabet; she could count to 100 and could write the numerals to 20. She was very observing and took great interest in classroom work and competition.

Nancy made this tremendous improvement in an environmental set-up which was established primarily for children with retarded mental development. Now that the child had attained normality, it was feared that further residence in an institution might serve as a handicap, might be embarrassing to her. A suitable boarding home was found and Nancy spent a year attending public school. During that year the I. Q. remained constant (97 when she left the institution, 96 one year later). Unfortunately, opportunities for play with children of her own age (outside school hours) were limited, but Nancy held her own well in competition with normal children. She ranked in the upper half of her class and finished the first grade a month after her seventh birthday.

Comment

Our present interest in the growth of intelligence received its great impetus from the experiments conducted by such men as Binet,[1] and Itard.[2] These men and others hoped that through carefully planned, ingenious programs of education and training they might be able to improve the intelligence of backward children. Although some of them have met with varying degrees of success, it is generally conceded that we cannot make normal children out of feebleminded ones. Recently, Doll[3] has called attention to the fact that, strictly speaking, the term mental deficiency is used to

describe a condition that is essentially unremediable at all age levels. On this basis, Nancy was not a true, clinical case of mental deficiency.

The reliability of I. Q. ratings made during the early years of life may be questioned. Several years ago, Hollingworth[4] wrote that the preponderance of evidence is to the effect that the I. Q. is unreliable below school age, there being too many variables, unmeasurable factors, unsolved difficulties. While she herself seems to support this stand, she is careful to cite the views of the opposition who maintain that valid and reliable I. Q.'s can be secured on very young children by competent examiners. Anderson[5] contends that "Infant tests, as at present constituted, measure very little, if at all, the function that is called intelligence at later ages." Even though the fundamental truth of this statement should be granted, it is still felt that such tests offer a gauge as to the infant's ability to cope with selected, standardized situations and problems in his environment. They also provide a basis upon which to compare certain achievements of one child with those of the group.

Wellman[6] comes out strongly for environmental influences in the mental development and progress of a growing child. She holds that some children lack the inclination to utilize fully the abilities and resources available to them. As a result, the I. Q. suffers proportionately. In the case here presented, not only was the test score extremely low at 21 months, but it was also true that direct observation of the child's behavior compelled a diagnosis of pronounced backwardness (nursing from a bottle, poor response to the spoken word, delayed word-sounds, lack of interest in surroundings, etc.). From that time on, the mental development was really phenomenal. It could be measured by accepted psychological tests; it could be followed in the daily life of the child in the cottage and, later, in the classroom.

Although psychometric test scores give concrete evidence of the mental progress of Nancy, the objection may be raised that they are not entirely reliable. In addition to the immature years of this child, the examiner had to contend with imperfect coordination, a fair degree of impulsiveness, marked sensitiveness to failure and an unusual degree of distractibility. As against these, it may be

pointed out that such errors were more or less constant throughout the entire period of observation and would penalize her fully as much at age seven as at age two. Thus it is felt that even though the M. A. and I. Q. ratings may, at some point, be erroneous, the error would be relative rather than absolute and would not materially alter the over-all increment.

There has been considerable discussion concerning the possibility of normal children in orphanages or institutions failing to make the expected mental progress (or even regressing) due to restricted opportunities, limited experiences or inadequate resources. The now-famous Iowa studies[7] of environmental influences place considerable emphasis upon such handicaps. Even within the confines of an institution, one placement may prove to be superior to another. Skeels and Dye[8] report marked improvement in the I. Q. ratings of 13 mentally retarded children under three years of age when they were transferred to what was presumed to be a more favorable institutional environment. Reports of this type have not been accepted without protest. In criticizing the Iowa studies, McNemar[9] has drawn attention to what he considers weaknesses and overenthusiastic statements. He condemns both the methods employed and the conclusions reached. But the weight of evidence seems to support the contention that I. Q. ratings may vary according to the presence or absence of certain concrete factors both in the environment and in the constitutional make-up of the child.

Nancy's boarding home care was of the poorest sort. The absence of social training and stimulation during the early months must have had a profound effect upon her. The institution was an improvement but still failed to provide a normal set-up. The important fact is that the institution, with its many disadvantages, was able to provide so much mental stimulation for this unfortunate child. It seems reasonable to assume that longer residence in the community may now serve to improve still further her social and personality integration which, in turn, would be reflected in a more favorable mental rating.

Bayley,[10] following her study of children up to three years of age, concludes that there is very little evidence to suggest that children's rates of mental development fluctuate with their state of health. At the same time she does concede that in individual cases

the health rating or histories of illness do influence the children's scores. Jelliffe and White,[11] many years ago, suggested that children may "lack the ordinary brightness that comes about spontaneously if they have lived under insanitary conditions that impair the general health and energies." In Nancy's case, there is no doubt about the impaired health. There is also ample evidence, from reliable sources, that during the early months she suffered from lack of care, attention and training. She was unwanted and unloved.

The possibility of this child having had a disease of the central nervous system (polioencephalomyelitis, meningoencephalitis) has been considered carefully. Head-banging, apathy, inability to stand or sit alone, muscular weakness, arrested mental development are all suggestive. The milder forms of these diseases sometimes may be undiagnosed. The clinical picture was confused by several acute infections. All that can be said at this time is that no nervous disease was recognized; no apparent residuals are now observable except a mild awkwardness which does not appear to be significant.

Summary

A case report is offered to show the unusually rapid mental development of a female child from the age of 19 months to six years. At 19 months, she presented a picture of pronounced imbecility.

She had been badly neglected in every phase of her young life. Apparently she had received no encouragement or constructive training whatsoever. She had bacillary dysentery, gonorrheal vaginitis, Vincent's infection of the mouth, ringworm of the scalp. An early inflammation of the central nervous system, although not diagnosed, must be considered.

This child responded to an improved environment even before she was able to recover fully from the disease conditions named. During a four-year period her I. Q. increased from 29 (Kuhlmann) to 97 (Stanford-Binet).

It is felt that Nancy had the potential capacity for normal development at all times. The suggestion is offered that her delay

in mental response was due to two outstanding factors: (1) lack of normal care and training; (2) malnutrition and impaired health resulting from a series of acute infectious conditions.

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PSYCHOSOMATIC CORRELATIONS IN MIGRAINE

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Report of a Case

In the course of treatment of a 28-year-old male with anxiety hysteria, migrainous attacks, which had occurred bimonthly for a period of 16 years and which the patient had completely dissociated from his phobic disorder, came to a dramatic and complete halt. It was possible to gain insight into the mechanism that precipitated and maintained his headaches. The case is presented as a contribution to the accumulating literature[1-12] on the psychosomatic correlations of migraine and it contains some interesting psychodynamic problems.

The core of the patient's difficulties was a neurotic character structure oriented around compulsive dependency with a need to cling to a maternal figure whose capacities and powers he greatly overevaluated. His self-esteem was diminutive and became undermined more and more as he made himself increasingly subordinate and subservient to the person he adored. The urge to cling clashed with an irrepressible wish for freedom and independence. The resulting conflict generated strong feelings of hostility which he could neither acknowledge nor express because of interference with the dependency drive. Never, he insisted, had he ever been really angry with anyone, nor could he even force himself to feel angry. Migrainous attacks were directly related to situations which produced resentment and rage.

The attacks began when he was 12 years of age at which time the family moved from New York City to take up residence in Long Island. The patient resented this change because it uprooted him from his friends and companions. He hated the isolation of the the country and particularly the fact that there were few children his own age with whom he could play. He had migrainous headaches on the average of twice monthly; sometimes they occurred every week. There were premonitory symptoms of depression and insomnia and occasionally he saw "sparks" and flashes of light. Pain would start on the left side then spread over the entire head after a few hours. During the height of the attack the patient would

confine himself in his room and would insist upon sleeping on the floor because the slightest movement exaggerated his suffering. Each attack was accompanied by nausea and vomiting. The duration was from eight hours to two or three days. Many physicians were consulted, but therapy had little effect on the frequency or severity of the attacks.

The phobias for which the patient sought treatment originated when he was 18 years of age. These consisted of fears relating to any situation in which he felt hemmed in and trapped, such as a closed room, an elevator or a train. As he grew older his phobias embraced any situation from which he could not escape immediately when he set his mind to do so. As a consequence his life became extremely constricted, and he was almost incapacitated in the attempt to observe a safe routine. His description of his emotions and phantasies when "trapped" is interesting: "When I feel I am in some place that I can't get out soon enough, the first thought that comes to me is that something terrible is going to happen to me. Why should I have to wait? Why should I be hemmed in? The thought comes to me that I will go mad. I'll scream, I'll pound the door if I'm in a room, I'll tear off my clothes. Maybe I'll lose my mind and go violent and get self-destructive. Maybe I'll kill someone around me. Maybe I'll go into a complete blank. The thought of being trapped is like doom itself. I want to batter my way out of the place. Yet I'm frightened because I might do something that's really terrible. When I do get out of the place the first place I head for is someone who'll be good to me and who'll understand me. Sometimes when I'm in a position where I can't get out on time I try to console myself with the thought: 'When you get out of this you'll be able to get to a person who likes you, who will take care of you as you are. It's worth holding on so you can later see this person.' I then picture myself with this person being caressed, being protected, and I feel that I am lucky that anyone would bother with me in the condition that I am."

As analysis proceeded it became apparent that both his migrainous attacks and his phobias were rooted in the same situation of compulsive dependency.

The patient was reared by a neurotic, hysterical mother, and a paranoid maternal aunt. He never knew the identity of his father,

and he suspected from earliest childhood that he might be an adopted child. Whenever he broached the subject of his paternity to his mother, she warded him off with a display of temper. Both the mother and aunt were threatened people struggling with the fear of the dark and with panicky feelings whenever they were alone. They impressed upon the patient over and over again the menace and danger of the outside world along with the need to keep aloof from people. His mother exposed him to a domineering form of overprotection. She hovered over him incessantly and showered him with indulgences whenever he conformed to her will. When he rebelled, she utilized techniques ranging from rage to martyrdom to force him to comply. Until well into his juvenile period she looked after him as though he were a small child. She accompanied him to school and back home again to protect him from fancied kidnapers and bullies. She was fearful lest he fall, or get run over, or injure himself. She refused to permit him to play with children in the neighborhood unless she were stationed nearby to supervise matters. She refused to buy the boy a bicycle because exercise might make his legs too thin, nor could he have roller skates for fear he might fracture his extremities or skull. He was dressed in Lord Fauntleroy clothes and forced to accompany his mother and aunt wherever they went whether on visiting or shopping tours. Despite his overprotection he received little real love and affection. He could never remember being kissed or wanting to kiss his mother.

In fantasy the boy retained a strong desire to play with other children, to be like others, to be independent and free. He often imagined himself in his daydreams as playing with other children and doing the same things they did. He watched them play outdoors from his window, and he was envious that their mothers permitted them to do whatever they wanted. He believed that eventually he would have a brother and sister to play with. He often wished he were an orphan and had no parents to answer to. "No being on time, no having to go to stores, no going out to visit, no being forced to do everything they wanted me to do. I thought it wouldn't be too bad if they did die. I visualized them as dead. Then I had no one to answer to. But then they would say: 'You ought to be glad we are here to take care of you. Some kids have

no mothers.' I'd say to myself they are lucky not to have a mother." He never expressed these wishes openly, and he conformed to the dictates of his mother although he resented her whining, complaining attitude.

When he was nine years of age, he would run out of the house to play whenever he got the opportunity. He felt inferior to the other children, and he tried to bribe his way into their company with toys or candy. Between the ages of 11 and 12 he started making real friends with the little boys and girls in his neighborhood. For the first time in his life he was happy in the realization that he was accepted and loved. However, when, at the age of 12, the family moved from New York City to a little town on Long Island all his fun ended. "I was among people who were different. If I could have continued in New York, I would have gotten along better. I went into a rut out there on the Island." The change was apparently a very traumatic one and throughout the analysis the patient kept referring to it as the turning point in his life.

The next seven years were characterized by a struggle between his feelings of obligation toward his mother and a desire to have friends and to find pleasures outside of the home. His mother resented his leaving her even for a short time, and she constantly reminded him that she had devoted the best years of her life bringing him up, and that she had sacrificed much to provide him with comforts that other children did not have. The patient was obliged to live a dual life concealing from his mother that he had friends and interests away from home. At the age of 15 he engaged in an adolescent love affair to the horror of his mother who exhausted her repertoire of tricks in a vain attempt to break up the affair. Out of a sense of guilt the patient tried to act very much more devoted to his mother, and he attempted to convince her that his interest in a young lady need not interfere with his obligations toward her. His love affair terminated three years later when he disovered that his girl had been unfaithful to him.

This discovery was extremely disturbing. "I lost my belief in people when she did that to me. I lost my respect for women. Before that happened I thought that there was no one like her. I never trusted her after that. Before, I had her on a pedestal. I figured the reason she did that was that I had no job and couldn't take

her places the way the other fellows did. The life we led was monotonous. If I would have been working and had a job I would have married her and this wouldn't have happened. I blame it on to my people for not letting me get away." The situation was directly linked up with his first attack of anxiety.

At the age of 19 he felt he could no longer stand being at home and, against the wishes of his mother, he applied for a job in a place 20 miles from his home. For the next four years he suffered from feelings of loneliness coupled with a desire to have someone close to him at all times. He had nightmares of being trapped and of being in places from which he could not escape. So long as he avoided situations where he felt hemmed in he experienced no anxiety. But as the years went by his feelings of emptiness and fear of being alone increased. He visited his family at least every other day, but this did not appease his sense of desolation.

In 1925, at the age of 22, he met and wooed a graduate nurse who was employed in a nearby hospital. In her he saw a haven for his problems. He believed that if she would only love him sufficiently and look after him he would get over his feelings of loneliness. Thrilled at the prospect of having someone to care for him he proposed marriage and was accepted. On the day of the marriage, however, he was suddenly seized with panic. He felt trapped and could hardly restrain himself from jumping out of the church window. "When the final vows were completed, I felt as though I was being locked up. I never got over the feeling of wanting to be single, yet I couldn't live without my wife. I needed her. I needed to know where she was every minute."

Subversively he had keys made to fit the locks in the places where she worked so that he could get to her without waiting, in case he needed her. Whenever he went anywhere she had to accompany him. He resented her visiting and even talking to anyone else. When at home he would insist upon pulling all the shades down as if this would eliminate the rest of the world and bring him closer to his wife. He had an irrational urge to follow his wife from room to room because of panicky feelings when she left him. At night he had nightmares all concerned with the theme that his wife walked out of the house leaving him alone. He would wake up with a start

and touch his wife to reassure himself that she was there. When she preceded him to bed he would make sure she was asleep before going out for a walk, but never did he go so far away that he lost sight of the house. Even then the thought that his wife might have walked out of the back door would cause him to run home to reassure himself that she was in bed sleeping.

One morning after a sleepless night he awoke and found that his wife had left the house. She had failed to tell him she was going out. He was seized with a severe attack of anxiety. He dressed himself quickly and rushed around town looking for his wife trying hard to appear nonchalant. When he finally found her in a grocery store, he could scarcely conceal his tears of relief mingled with indignation. When the wife asked to go to Atlantic City to visit her mother for a day or two, he felt that the bottom of the world had dropped out. He begged her not to leave him, but when she insisted, he finally consented to let her go. "I drove her to the station, but refused to see the train pull away. As I drove away I suddenly became very, very nervous, melancholy and depressed. I felt panicky. I quickly turned the car around and headed back to the station. I arrived just as the train did, and my wife came to the car. I told her how I felt and begged her not to leave me. She stayed, but the experience left me shaky and fatigued."

The extraordinary nature of the patient's dependency was corroborated by an interview with his wife who stated: "He practically wanted to swallow me. I had to be around him every minute. He was jealous of every minute I spent away from him. When I went away to visit my mother for a day I could see him tremble like a baby. He'd even whimper and beg me not to leave him. He insisted on going with me everywhere and refused to be alone a minute."

The patient's marriage seemed to magnify his phobias and his migraine, and he developed anxiety unrelated to any specific situation. To appease his anxiety he exploited his dependency on his wife more and more. His attacks of anxiety became more exaggerated as time went on, and he finally applied for help to a general practitioner. Weekly visits continued for a period of three years, and he often begged to be assured that if his suffering became too intense he would be given a hypodermic in order to be

"knocked out." He insisted that he could not wait in the anteroom because he had a feeling of being trapped. He wanted aid immediately upon coming to the office, and the doctor gave him the special privilege of coming in at the side door at any time of the day or night. Although the patient did not use the side door, the thought that he could run to the doctor and be with him immediately was of great comfort to him.

Shortly before he started psychiatric treatment the patient's wife insisted upon a separation. He refused to grant this. She finally left him, and her desertion reduced him to a state of prostration. He felt helpless, alone, unloved and unwanted. He became capable of functioning only when a friend of his wife made gestures of friendship toward him, and he grasped at her like a drowning man, very soon entering into the same kind of relationship with her as he had with his mother and his wife.

During treatment it became apparent that his character structure of compulsive dependency undermined his self-esteem and created tremendous resentment and hostility that he turned onto himself. The depth of his hostility, and the strong need to repress hostile manifestations were indicated by the obsessions which horrified him when he lived with his wife. These thoughts were to the effect that he might do something terrible to his wife, like kill her. It would be an effort to keep from screaming and from smashing things up. "Underneath I felt terrible that I hated her real deep, but I couldn't express it, because I felt no one else would be interested in me. It was because I felt I didn't amount to anything. Ideas would flash across my mind that I might walk in my sleep and possibly plunge a dagger into her heart." Consciously he never permitted himself to lose his temper with his wife. He condoned everything that she did. Nor was he able to offend any other person because the idea occurred to him that he would not be able to ask these people for a favor or for the use of their company if and when he needed them.

He forced himself to act overly nice to the woman who succeeded his wife because he felt he could not live without her. Attacks of migraine occurred regularly, and it soon was apparent that many of these attacks followed episodes during which he had been obliged to swallow his resentment. For example, on one occasion his girl

insisted on going to New York City to see her mother off on a boat to Ireland. He feared going to the city lest he be trapped in a traffic jam. Yet he did not want to stay home alone. He hated himself for feeling so helpless. He was afraid that something catastrophic might happen to him if he remained away from his friend. Consequently he made himself accompany her. It took much effort to conceal his tension and excitement. Inwardly he burned with indignation that she had forced the situation on him. On the way home thoughts came to him that he might scream out hysterically and be hospitalized. The end result was an attack of migraine which lasted for several days. Following this episode he begged his girl never again to force him to go to the city against his will.

On another occasion he could not start his car in the morning to get to work. He was overwhelmed with a feeling that something dreadful would occur unless he could get away immediately He felt trapped and at the mercy of his car. At the same time he hated himself for needing his car as much as he did. He knew he could not leave his car and that he was completely powerless without it. He had an impulse to smash the motor with an axe but his need for the car was so great that he reprimanded himself for the impulse. The result again was an extremely severe attack of migraine. Associations to this incident recovered a repressed memory of an event that had happened when he was four years old. At this time he was being held by his mother in a basket-shaped swing which was designed for infants. He wanted to play in one of the larger swings, but his mother declared he would hurt himself if he did this. She even insisted upon restraining him in the baby swing when he tried to swing higher. "I wanted to be in the bigger swings, but my mother wouldn't let me. I screamed and yelled, but she held me there. She told me if I yelled she would take me home. Then I had an awful headache and I vomited."

Six months after treatment began, he got an inkling of insight into the consequences of his dependency and he was suddenly seized with suspicion that his girl was not the creature of perfection and godliness he had imagined her to be. He could not understand why he had hitherto yielded to all her wishes. One of her idiosyncrasies was a fear of crowds and even smaller groups of people. As a result she prevailed on him to spend all of his time with her alone.

While he welcomed being close to her, he rebelled inwardly at his confinement. Secretly he nursed a desire to visit a local dance hall to drink beer and to mingle with other people. He also had a hidden desire to go out with other women, but he had never dared to do this for fear his girl might discover his philandering and leave him. When he revealed his secret wishes, he experienced a great release of indignation, but then he chided himself for even thinking of going out with other women.

Several weeks later he got enough courage to embark on a date secretly. The aftermath was a feeling of guilt and a conviction that his girl would surely abandon him. He would have liked to have continued his newly-found friendship, but this he believed would be too perilous. He resented having to give in and the result was another migrainous attack. It gradually dawned upon the patient that he was missing much in life merely because he found security in the company of his girl. He began to resent her possessiveness. For the first time he felt openly hostile toward her and he believed himself justified. Intense feelings of hostility were also directed against his mother and he decided he would not visit her for a while.

Two weeks later, in response to a frantic letter, he visited his mother. She chided him for staying away so long and insisted that he spend the night at her home. When he told her he could not do this, she became furious. He stormed out of the house and rushed back to his girl begging her to accompany him to a local bar for a much needed drink. She refused to do this and to his surprise he reacted with a speech which proclaimed the fact that he had certain rights and that she was interfering with these rights. One word led to another and finally his girl shut the door in his face. Indignantly he went to the bar alone. He could not enjoy himself, however, because he believed he had done something outrageous. He slept fitfully during the night and could scarcely wait for morning to telephone. His friend upbraided him severely and pronounced their affair terminated. Despite his pleas she refused to see him and he finally had to force himself on her. His apologies were profuse and he begged her to take him back, promising to do anything she wanted. She yielded, exacting from him a promise never to re-

peat the performance. "I felt all upset inside. As soon as I left her, my migraine started—a terrific headache that started around my eyes. And then the vomiting. I felt I had nowhere to go and no one to talk to. I was entitled to the diversion especially since I got so upset last night, but as soon as she threatened me I saw that I was going to have to swallow my pride and chase after her. I started to cry like a baby and I told her I wouldn't do it again. I don't like the idea of giving in, but I wouldn't have if I didn't have the need for her, because if she leaves me I won't have anybody to talk to and feel secure."

This incident was the turning point in the patient's treatment, for he could see clearly how his resentment had been turned upon himself and had resulted in migraine. He came to realize more and more that his relations with his girl were interfering with what he really wanted from life. He became increasingly self-assertive and as his dependency ties dissolved themselves he found it possible to function under his own power. He became capable of feeling and expressing resentment, and soon his migraine stopped completely as did his tension and his free-floating anxiety.

It is interesting that his migraine vanished before he gained insight into some of his deeper problems. For instance it developed later that he had narcissistically overevaluated his own penis and was deeply concerned with possibilities of its loss. He had compensated for this by heterosexual overindulgence to the point of satyriasis with incomplete pleasure gratification. He was also plagued by attacks of priapism. Sexual intercourse symbolized for him a means of fusion with a love object, but, at the same time, it signified a dangerous situation that might result in his castration.

Summary

A case of migraine is presented which illustrates the need for a thorough dissection of the character structure in psychosomatic problems, in order to determine why hostility is being generated and why it cannot be overtly expressed. It is possible that where migraine "burns itself out" with advancing years or where a spontaneous cure develops that the character structure has altered itself so that hostility is either diminished or its outward expression

enhanced. The diversion of hostility from autonomic channels can occur without a conscious realization on the part of the patient of many of his deeper problems and conflicts.

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REPORT OF ANALYSIS IN CONJUNCTION WITH CONVULSIVE THERAPY

BY ELSWORTH F. BAKER, M. D.

The Patient

The case to be reported here is that of a single woman of 27, diagnosed psychoneurosis, mixed type. Her analysis consisted of 123 sessions of 30 minutes each. During the period of the last 37 sessions, she received 18 injections of metrazol. The treatment to be reported here was administered at the New Jersey State Hospital, Marlboro, N. J.

FAMILY HISTORY

Nothing is known concerning the patient's grandparents. The father was 59 years of age at the time of her treatment. He was unstable, talked to himself, and was definitely abnormal. The mother was 61, very overprotective and "peculiar." There were no siblings.

PERSONAL HISTORY

The patient was a normal birth, but suffered from convulsions frequently as an infant for a period of one year. She had tantrums and was thereupon allowed to have her own way. The child was never allowed to play with other children but was kept by herself in the house. She completed grammar school and then was sent to a private school at her mother's insistence, since she had heard that men were attacking girls at the public school. She has always led a very sheltered life; and during her college career her mother would take her to college and call for her at night. She never participated in any of the school activities and had no intimate boy friends. She was an honor student but remained out of work for four years after graduation and then took a course in stenography and typing. She at last obtained a job as typist for an official court reporter but held this for only six months when she was forced to stop because of her illness.

As a young woman, she always made her home with her father and mother, and at home was "never allowed to do anything." She

never washed a dish or made her own bed, or lit a fire. Finally, she grew to be very demanding of her mother and expected her to do everything for her.

Early Events

The patient remembers playing the piano by ear at the age of four. She says she could play all the hymns she heard sung and recite all the books of the Bible. When she was six her grandmother locked her in the closet because she made a noise when her father tried to sleep. As a child, she had an intense fear of dogs and would even run in front of automobiles to get away from them. She says her mother used this as an excuse to take her to school.

At the age of eight, the little girl stole a piece of chalk. A boy told the teacher, and she denied having it, then let it fall to the floor. She was forced to remain after school. On various occasions, she stole money from her mother's pocketbook. Then, another time, she complained to the teacher that a girl had taken her blotter when the girl really had not done so. She had placed the blotter in this girl's desk and found it when the teacher let her search. At the age of 12 while at a girls' club, she passed flatus with noise and everyone made fun of her. She said, "I never got over this and many a night I groaned thinking about it. I used to hear my father do it and got very angry."

The patient said: "I like to see children hurt. When I taught for a while in a private school, I would hold them on my lap, and also beat them to see them hurt. I took one boy by the throat and choked him when he annoyed me. When small, I used to hit myself with a hair brush or coat hanger or ruler to see if I could make myself black and blue in order to see how hard my father must have spanked me when he made me black and blue. I would read over and over letters in Vox Pop from girls between 13 and 19 who complained of their parents spanking them. Then I would go to my room, take down my bloomers, look at myself with a mirror and spank myself real hard and live through the experience of the girls. One time I had a peculiar feeling in my rectum, as though a lot of white material rushed out of me. I got frightened and stopped. It might have been leukorrhea. (Orgasm.)

"I can remember mother constantly opening the front door to see if I were out front, and during the infantile paralysis epidemic she would not let me out of the yard. She and my grandmother always threatened to tell my father things I had done. He would usually sympathize with me, and my grandmother complained that he thought the sun rose and set in me. She told me that I was wicked because I would want my own way, and quite early in life I got a fear that I would never go to heaven and was very frightened about it. When I was 12, I had pneumonia and was afraid I would die and go to hell. I was always worried about my looks and think that I am just plain ugly. I always had a lot of trouble with constipation.

"When I was 12 years old, I was very embarrassed when my mother insisted on giving me a bath. I begged and fought, but my father forced me to give in. My mother continued to do this for a long time, and I finally lost my modesty. One time, I rebelled and threw water on her and she stopped. I always craved friends but it never seemed possible to have them. When I was young I used to bribe the children to play with me by bringing out my toys, but they would want to play at their own doors and my mother would not let me go there. This gave me the idea that I was peculiar even when very small, and when I talked to the other children they were not interested, so I became very self-conscious.

"I hated to express my emotions in front of anyone and always wanted to appear calm. I daydreamed of marriage but now I don't know what I would want. My chief interest has been music and I wanted to be a church organist. Music was very easy for me. I played by ear before I took lessons. I also sang in the choir but I was too bashful. I was always very nervous before playing but after it was over I wanted to repeat it, and after I would go home I would repeat the piece and picture the applause. I always dreaded walking to the piano and away from it but once there I got lost in the piece. I have always been very shy and felt that I was not like other people. Children did not like me and made a butt out of me. My clothes were different. I had to wear high shoes and heavy stockings, and the girls made fun of me, but mother made me wear them just the same. I did not dare get angry because I was afraid of my father."

Relations to Parents

The Mother. The girl led a life, tremendously sheltered by her mother, although she used to fight frequently with her and they have struck each other. She says: "I was completely dependent on my mother. She would tell me how to sleep and would put a blanket up to keep the sun from shining on me and shut the window in the mornings before I got up. The whole house revolved around me. I always wanted to run my foot over her face, but she would not let me. And yet, I always envied other girls' mothers because mine was so old. I complained to her that she did not menstruate like other girls' mothers. Once she told me she wished she had remained an old maid, which made me angry because I thought she would be happy that she had me.

"Many times I wanted to kiss her and would beg her and pull her over and kiss her. Since my illness I have not wanted to, and she falls all over me. I have always wanted sympathy. When I was 11, I called her a whore and she cried. When I was in my twenties I used to kick and slap and throw things at her, and she would kick and spit at me."

The Father. "I have always been afraid of my father. Every time I went for a walk with him I was afraid he would put me in a welfare home. When I was 10, I misbehaved and he wrote to my music teacher and told her I could not have any more lessons. Mother had some share in making me afraid of him. The whole house seemed to treat him with such awe. As I grew older I hated him, and yet I went out with him and wanted to like him, but would not allow myself. I was always glad when he went out for the evening. When I was 10, he struck me in the face and made my mouth bleed, and then he spanked me because I had kept moving when my grandmother curled my hair. I showed him my mouth, and he spanked me again. I never forgave him. My neighbors said that I would come out of the house saying, 'I hate my mother and father.' I don't remember including my mother. I used to worry what I would do if anything happened to her. When I was four years old, my father slapped me for putting one shoe on top of the other. I haven't kissed him in seven years, but I resented it when anyone else found fault with him."

Sexual History

She was always interested to know where she came from and frequently asked her mother whether she were an accident or if she were planned. The mother told her that she had an evil mind. When she was 11 years old, a girl told her that a man urinated in the womb. She admitted masturbation, but did not know when she started and asserted that most of the time she must have masturbated in her sleep.

She said: "When I menstruated I would get it on my fingers, so that I knew I must have masturbated. I never masturbated as a child because my mother watched me too much. When I was older I put my fingers at the sides of my legs, and in the office I would twist my fingers around in front of my rectum. I have masturbated for years but never in bed. I enjoyed menstruating because there was such a fuss made over it. When I started my parents told me not to tell anyone, but I told a lot of girls who did not know about it before, and showed them my napkins. My mother was always so elated when I menstruated. I used to put the napkin to my nose and tell her that I liked the odor. I said I lost the blood from every part of my body.

"Mother always had a morbid fear that I would be attacked. When I was 17, a boy said: 'You have nice hot legs;' and he tried to kiss me. The same summer, a minister, 60 years old, put his hands along my neck and chest and told me that he loved me. He also put his hands under my arm. One day, he invited me to the back of the office where I was working and grabbed me and kissed me on my mouth and put his hands up my clothes. I went home crying and told my mother. I was not allowed alone after that.

"I was always very interested in getting information from my mother about married life. She was disgusted and said neither of them were sexy and she would be ashamed to be that way. I asked when they stopped having intercourse. I can't tell you how my father must feel without crying. He got little satisfaction out of my mother. He got it all out of me. I asked my mother how people would have intercourse the first night they were married and the position they would use. A colored fellow on the freight elevator at college would smack his lips as I passed."

She said, "When I was quite young on one occasion my father spanked me, and because I thought it unfair I developed a sexual feeling. Then whenever I saw a child spanked I got the same feeling again. (Cf, Freud, 'A Child Is Beaten.') I would like to lie in bed and imagine I was spanking a child just to bring on this feeling."

Relation to Homosexuality

"When I was 13 years old I had a crush on a colored waitress and even corresponded with her all one winter. I have had numerous crushes on my teachers, even during my twenties. When I was 15, I had a wild crush on the soprano at my church. I used to play for her. She gave me sex instructions. She was wild and was put out of church. She had been married and had two children. I never trusted her nor considered her sincere and thought that she could not be true to anyone, yet my biggest joy was to play for her and to hear her sing. When I was 18 years old I had my picture taken with my arms around her, and kissed her. I have had an awful lot of crushes on girls in my day and all the people I was fond of were singers. At no time did we have any sexual play."

Fantasies

"When I was 13 years old I used to have many imaginations. I would go to bed early just to indulge in them and finally I would indulge in them in the daytime. I imagined I had younger brothers and sisters and would picture coming from high school and have them come running to meet me. They thought a lot of me. I was the oldest and was helpful to my mother, but I always pictured someone else as my mother. I would go through the process of giving them baths or wheeling the baby carriage and go to the store. I was a great helper. I kept up these fantasies until I developed my mental illness. I was never cruel or harsh to my brothers or sisters. I would imagine being away from home and being married and writing letters to them, and they would write to me. I actually wrote the letters.

"One of my latest fantasies was that my father was a minister and had a lot of children. I would picture myself getting married and going through the ceremony. As I grew older and imagined

these things I would develop a peculiar sensation in my rectum, a sort of contraction. I got frightened that I was carrying it too far and was becoming sexually perverted, but I could not stop. It became an obsession with me. My father would think it terrible if he knew. I can't even say everything to myself. Once at the university I wrote a letter to an advice column describing my brothers and sisters and how I took care of them. It was so good they put the letter in the paper and wanted to photograph the family. I always wished that I were a twin and in the letter said the twin had never helped me. When I was 24 years old, I wrote saying I was married and had three children and had no parents but had two sisters, 16 and 14. One night, one of my sisters came home late and I spanked her. I wanted to know if I had the right. I used to fantasy another girl in the class being my twin sister and we were very affectionate and were never separated. I also would fantasy being the younger sister of one of my teachers."

ONSET AND SYMPTOMS OF MENTAL DISORDER

The patient relates the beginning of her illness to the time when she was 14 years of age. At that time, she developed the idea that some day she would end her days in an "insane asylum." She had always been told she was exactly like her father, and one day when she was 14 she heard him talking to himself at the table and she thought that both of them were "insane" and felt that she could not help herself. Since then she has been more or less depressed but especially so since the age of 20. She declares she has thought of suicide all of her life but never has had the nerve to attempt it, and says that her religion does not allow it.

Her severe symptoms developed about three months prior to her hospitalization when she was forced to give up her work, having suffered a collapse at her job. She could not type or concentrate, became highly nervous, began to write to her friends that she was going crazy, refused to eat, and believed that she had stomach ulcers. She did not wish to talk and would either stay in bed or sit in a chair and stare into space. She cried a great deal, complained of vague headaches and pains, stopped playing the piano and lost interest in everything. The patient wrote a note saying "they"

would find her at the bottom of the lake, although she made no suicidal attempts. She felt God was punishing her because she had never done anything worth while in her life. She said she had a great desire to let herself go, an intense urge to masturbate and believed she did so in her sleep. She wanted to become "insane" and remain so in order to escape her troubles and even tried to induce hallucinations without success. She tired easily, said she was always more or less tired, felt "full" all the time, and occasionally had palpitation, especially after getting into bed. She was unable to sleep and was very constipated. She did not believe that she could be helped and preferred to spend her days in a mental hospital rather than at home where her friends could see her.

The young woman's father said that every time she met with a reversal or disappointment she would develop symptoms. Three years before her admission, he wished to move; and she developed a severe crying spell, remained in bed and refused to eat, persisting in this until she had her own way. She had a second similar spell one year before admission when she was disappointed in not receiving a job.

At the time of her admission she complained that her mind was completely gone and that she was returning to an infantile state, "as a psychiatrist had told her she would." She said she could not grasp anything and wondered how much longer she would know anything at all and so she kept trying to test herself out. The thought of getting better never occurred to her and improvement seemed remote and impossible. She said, "I have so many doubts and suspicions, I don't know if I would be willing to put up the effort to get well." She also said: "When I began to break I felt that I had been very wicked because of all the times I had sworn at my mother, and struck and kicked her. It seemed worse because I had gone to church and should have known better. I wondered if I had gone to church through fear and if I played the organ just to show off." In the hospital, she showed very little interest in her surroundings and could not be made to apply any continued effort at an occupation. She preferred to remain in bed, but kept herself tidy and ate voluntarily.

Analysis

In spite of the fact that this patient protested she was not willing to put up any effort to get well, she retracted her notice to leave in order to be analyzed and waited a month for the analyst to return from his vacation, although, during the analytic hours, she complained about her hopeless condition and complained that she was not able even to worry about it, which seemed the worst part of it. She said that she wrote her release and kept it in her drawer so that if she got to the state where she did not know what she was doing she could still get out of the hospital, and she made arrangements with one of the other patients to tell her every day that she could sign herself out. She constantly tried to convince others that she was hopeless, felt sorry for herself and said that she got satisfaction doing it. She made several foolish little attempts at suicide when she knew very well that she would never carry them out. They were such things as putting the covers over her head and closing the window and stopping breathing momentarily; and she would make slight attempts at strangling herself. On one occasion, she put her head in the bathtub for a few seconds.

She said: "I decided I did not have the courage to live nor the courage to die and thought this was the worst kind of despair. I keep feeling more dead all the time. I would like to have a magic wand waved over me. I used to picture myself getting well like that, and wished that I were a case for shock therapy because they don't have to take part in getting better."

At the fifth analytic session, she said: "If I said the thoughts I have I couldn't look you in the face again. I would run and hide. They are so awful. I had them in July. Shit! I kept thinking it all the time. I got so I kept asking myself if I were eating it. I had other thoughts. God is shit and shit is God. Jesus is shit and shit is Jesus. (Cf. Freud, discussion of paranoid condition.) Even when I went to church I said it was coming out of people's eyes. My doctor told me to keep saying over and over, 'I will be all right;' and I would say 'I will,' and then I would add something ridiculous, like, 'I will pee.' Another word that bothers me is 'fuck' and I don't even know what it means. Two years ago, when playing anagrams with my father I built it and asked if it were a word. He said it was a bad one."

The patient frequently expressed a hope that we could find a physical cause so that she could be treated more easily and said, "It is so long since I have had a normal thought I wouldn't recognize one." She developed a fear that she would get worse and be transferred and get syphilis and then take it home to her mother and father. She took on symptoms of other patients, walking like one, rubbing her hands and pacing the floor like another. She was allowed to go home for the week-end and said that everything looked strange. Almost daily she complained of being hopeless and getting worse. This was, however, not borne out because she did begin to work on the ward and took more interest in her surroundings. She said that she went to bed every night intending to smother or strangle herself.

She said: "At home many nights before I would get in bed I was afraid I would be driven to go downstairs and get a hammer and kill my father. I had so much against him. I was also afraid he would kill us. He talked to himself and annoyed me. When I sang in the choir I was afraid I would suddenly go crazy and jump over the rail. After reading a book in which someone was killed I knew that was what I wanted to do. I got very calm for an hour and figured I would go violently crazy that night and choke my mother. I told her about it but she was not afraid. Before I had my breakdown, I never thought of killing my mother, but I did my father. For a number of years I had such a fear that he would kill my mother and me that I wanted a lock on my door." At the fourteenth session, the patient declared that the "full" sensation in her stomach disappeared while she was at home and was present only when she was in the hospital. When she went out walking she planned on being run over but in fact was really more than careful. She said that names and hymns would go on indefinitely through her mind, and she sang, "She's a Young Thing and Cannot Leave Her Mother." She said that just at the beginning of her onset of symptoms she had a period in which something seemed to scream that she was wicked so loud that she wondered why people around her did not hear it. One night, she begged her mother to get out of bed and said that in five minutes she would be "violently insane" and would kill her. She would stand and look in the mirror and note how expressionless she was. She thought she was be-

coming like an idiot and said, "I would rather be blind than be like this. (Castration for guilt.) I was always satisfied with my eyes. (She came without her glasses so the analyst could see her eyes.) My life is ended. I don't want to come up here but when I don't I feel worse. I worry what would happen to me if you got sick."

She cried occasionally during her analytic hour. At the same time, she would tell how at home she could beat her mother at various games. Coming back from one week-end, she said, "I didn't speak to my father and put a knife to my wrist to torment my mother," but at last admitted that the piano at home seemed normal.

At the same time, she said: "I am getting round-shouldered. I am going back to foetal stage. I seem to be living in a world of my own, shut up with myself. I often hear my name called and see mice in the room and people look in my door when I know that they don't. I get the same funny feeling in my rectum that I used to get but I derive no pleasure from it. It makes my heart beat fast and I feel that I have contractions. I used to wet the bed and wet my pajamas during my 'teens. I want my mother's sympathy. It makes me sad to think my father can go on living and be interested in things while I am here. I want both my parents to realize the tragedy of it."

At the seventy-eighth session she said, "I sat on my mother's lap. I wanted to come here last summer because I was afraid I would kill her. Before I had my breakdown, I never thought of killing her, but I did my father." At the time of the eighty-second session, her father was killed by a train, possibly a suicide, following which she said, "I did hate my father and his death hasn't changed me. I am less afraid to go home. I won't commit suicide and leave my mother alone. When I first got sick I was tender and affectionate to my mother, then I began to be afraid that I would kill her."

At the eighty-sixth session, the patient had been started on metrazol convulsive therapy. Following her first injection she said, "When I came out of metrazol my first thoughts were of my father. I tried to think of the day he was killed. (Her analysis continued while she was under metrazol treatment). When I was home I noticed how lonesome it was around the house without him. I was,

however, able to read a book and be interested in it. This morning I had a real feeling about my father's death and I cried. My mind is better I am sure of it. I am foggy in some respects, since I have forgotten the date of my father's death." She cried frequently when talking about her father. She said that she could picture him in her room dictating to her. At the same time, she spoke of how much easier her work seemed at the hospital.

Previously, she had constantly had the symptom of believing that she had an obnoxious odor. After the sixth injection, she said, "My pajamas do not appear to smell even though I wet my bed during the treatments. More and more, I have feelings in regard to my father's death. I am feeling better and more interested. I am even able to forgive him the spanking he gave me. I am beginning to care how I look. I can read. I worry about my mother being home alone and the last time I was home I told her to be careful. I am giving her orders instead of getting them. I think my father's death has helped me more than the metrazol has, but I am willing to have his death in order to get better. I am so selfish."

The young woman began to realize her deeper feeling toward her mother. She said that she thought her mother was worse than she was and added, "I can hardly stand to look at her. I don't want her to go on the ward for fear the others will see her. I used to want to kiss her and beg her and pull her over to kiss her. Now I don't want to and she just falls all over me. I have pictured getting ready for her funeral and would try thinking how she would feel if I died." She realized her great dependence on her mother and also the hopeless situation of trying to change her mother and then began to worry about something happening to her. But she told her to go to hell when she visited her at home. She said, "My mother thinks I am worse now because I stand up for my rights. My mother won't let me break away from her. You don't know her." She said, "I realize that I developed a (my) neurosis as an escape from my mother's domination and I realize that my mother is mentally ill. I have no respect for her. She says that I would never find another mother like her. I should hope not. She has two dumb brothers but gets furious when I tell her. Since I have talked more freely about my mother I have not had the fear of something happening to her. I have no religion, no faith, just a

fondness for church music (Cf. God is shit, Jesus is shit). I was dragged to church so much when I was small, and if mother would like a preacher I would not. I guess I am not religious because my mother is. I do not plan on marrying. I have no desire to but I have an aversion to being an old maid. I am simply neutral toward sex."

This girl brought several dreams, to many of which she had few or no associations. The first dream which she brought at the beginning of the analysis was: "Mother, father and I were walking along 14th Street in New York City toward Broadway. I insisted on walking through the lobby at Ohrbach's. Mother fell down. I said it was my fault for insisting that we go there. We shook her to bring her to consciousness. I woke up and said, 'I am making her unhappy and I shouldn't.'" This shows her love triangle and represents the Oedipus situation. She wishes to be free of her mother but feels guilty. "I am making her unhappy and I shouldn't."

"I came to see Dr. M. I walked backwards. He started to examine me. I was pleased he couldn't see anything." She associated to this the fact that she had gone to see this doctor about constipation but was glad that he couldn't see her exposed (analytically). At the beginning of her analysis, she had been unable to eat and thought she had ulcers of the stomach. This illustrates her oral and anal eroticism.

"A friend was telling mother and me about a convent where they beat girls terribly."

"We went to a choir for special music. I wanted the choir director to point out where we were to sit. He pointed out two seats." Here we see her masochistic and anal erotic trends. At this point she brought out her beating fantasies which are given elsewhere.

"I was standing in front of a mirror with my hair curler. A colored man came over and put his arm around me. I was frightened." The mirror is her analysis, the colored man and the curler refer to her forbidden sex life which frightened her.

"I was in the choir loft. Mother was on one side and said something about saving a seat. I wanted to save a seat for the woman in charge. My mother told the woman my desire to save the seat for her."

"I went into a room and every time I went to sit down someone told me the seat was taken."

"I went to work in the office. A woman came in and lay down. I lay down beside her and said, 'It is nice to talk to Elsie.' My father came out and seemed disgusted."

"I was sitting on round seats at a counter in a ten-cent store. A woman was giving me a bath. She let me wash my rectum. I was embarrassed. She put powder on me." During the course of these dreams she brought out her homosexual component. She talked about her various "crushes," which are given elsewhere. Her homosexuality is connected with her mother. (A woman was giving me a bath, she put powder on me). The woman is her mother. Her conscience condemns this impulse. (My father came out and seemed disgusted).

"There was a man in the dream and an adorable baby. Father was going to reprimand it for not having done its home-work better, but instead picked it up and praised it." Her associations go to her earliest memories, which concerned her rectum and constipation. By constipation, she received attention from her father. At one time, her father said, "I don't want to hear any more about constipation." She had frequent dreams about the kitchen, referring to the intensity of her oral and anal level.

This dream followed her father's death: "Father was smiling at me. I hated to have him see me out of my mind. I didn't mind with mother. When I saw him dead his right hand was gone. I thought it was the hand that spanked me." Her father is castrated by his death.

The following dream occurred after she had received two metrazol treatments. "One grandmother died and two days later the other died." The grandmothers undoubtedly referred to her injections which occurred two days apart. She said that on awakening from each treatment she thought of her father, and found that she had urinated. (Cf. Havelock Ellis) (Urination=orgasm.) This illustrates her attachment to her father. She cried during the session and said she felt better mentally. She complained that she could feel her father's death and was more anxious to see her mother. Later she turned against her mother.

"I dreamed Miss B. was dishonest." She associated that to the fact that she was dishonest and said, "I am a hypocrite."

"I was urinating and mother tried to stop me because a man was there."

"You looked out of the window and said, 'Hasn't that brat beautiful hair?' I looked out and saw a child with curls." These dreams occurred the same night. At this time, she produced a great deal of material against her mother. Her mother has overprotected her and prevented her from reaching a heterosexual level. She at last sees her genitals (I looked out and saw a child with curls); she has reached the genital level.

"Elsie was walking about with a sign saying, 'What a girl could do in ——' (this city—the one in which she actually lives is noted for its strict religious atmosphere, and represents the actual home situation with which she has to comply.) She said she realized the hopelessness of changing her mother and has decided to put up with her but not to let her get her down. She said, "I have no religion, no faith because my mother has." She blamed her mother largely for her condition.

The girl said, "I now realize that I really wanted to be analyzed and think that I am well although my memory is still very poor. (Result of the metrazol.) I have an offer to play at the church meetings this summer and I wish that my father could have seen me get better." At the 123d hour she felt that she was well, signed her release, and was allowed to go home.

Comments

This is the first case in which the author attempted to combine convulsive therapy with analysis. The latter was conducted for 86 sessions before metrazol was started. Because of the expediency of bringing about recovery in cases in a state hospital as soon as possible, and since this girl seemed to be a long case, and could not associate well, it occurred to the author that she might be helped with shock. The analyst remembered that early she had expressed a desire to be treated by some method that required no effort on her part. Metrazol was suggested to her and she readily agreed, even going so far as to induce her parents to give consent. The psychological factor here cannot be ignored. The analyst is not

prepared to say which—of the metrazol, the death of her father or the analysis—was the prime factor responsible for her recovery. Undoubtedly all contributed, but certainly the insight into her mechanisms gained through the analysis offers a better hope of permanent cure than recovery by either of the others alone. It does seem that metrazol and possibly also her father's death expedited her recovery.

At the beginning of the metrazol therapy, the analyst was rather discouraged at the girl's complaints of her loss of memory and confusion. The mechanism here seemed to be a repression of painful issues by which she felt she was getting better. For example: She did not remember ever having discussed masturbation and even denied its occurrence. Her associations became meager. A more active method was therefore used; she was urged to discuss given topics, and many important dreams were actively interpreted. She accepted readily the interpretation, an acceptance which was borne out by the benefit she derived. Incidentally, from the time of the third injection, she complained of pain in her back, which was attributed to muscle pain. She was dicharged before it was discovered that fractures of the dorsal vertebrae occur in metrazol treatment. Undoubtedly, her spine was fractured. Her dreams illustrate the progress of her analysis, with her final genital dreams showing the development of her libido to a level at which she can adjust in society. She had considerable insight into the difficulty of living with a narrow and eccentric mother.

This girl, who appeared to be a difficult case, progressed through an analysis of her mechanisms to recovery in a period of 123 sessions, only 37 of which occurred after metrazol therapy was started. This case seemed to offer the hope of shortening formal analyses by combining with "shock" treatments. Active analysis was essential. It is to be noted that this girl's overt neurosis was of less than six months duration, with, therefore, a good "shock" therapy prognosis. However, her whole life situation has been changed; and she is recovered, rather than merely back to her former prehospitalization status.

The following letter was received from the patient six months after she was discharged, in answer to an inquiry as to her progress.

"I have been simply fine ever since I've been home. In fact I feel better than I ever felt in my life. People are constantly telling me how very well I look, and my friends all see such a difference in me. I can actually detect a difference myself. I think I'm a great deal friendlier to folks in general than I used to be and am really more pleasant. Then too, I have observed trifles do not bother me in the way they used to. I do not get upset nearly so easily or as frequently as formerly, nor do I worry so much.

"While I feel very badly over my father's death (I felt it more after I got home than I had in the hospital), yet I cannot help but notice how vastly different it is for me around the house. I have such a sense of freedom that I never possessed before. When I talk or do anything, I do not have to worry how he is taking it. I never felt free even to talk while he was around. Now I can really be natural. I guess I must feel like a prisoner who has been released or as if some weight had been lifted from me. But please do not misunderstand me. I would even gladly sacrifice this freedom to have my father back again.

"I have kept quite busy since leaving the hospital. As you know, I started to play for the meetings on June 26, two days after my return home. I continued to play every day throughout Labor Day, never missing a meeting. But, of course, that merely kept me busy from 9 to 10, and when I am well, I like to be doing something constantly. I love to study so I decided to take a course in bookkeeping which was being given at the Adult School of Education. I went there three afternoons a week, and in between times, spent considerable time studying. Almost every night I went to the boardwalk . Then in the fall, I decided to take a business course in ——. I started October 10th and am still attending there. I expect to be finished in about six weeks. You see, I stayed home several weeks to take a temporary position in a law firm in my home town which my former employer obtained for me. I got along very well at the job and gained some valuable knowledge and experience. I surely do enjoy going to the city alone every day to business school. I get along there very well, and often marvel at the way I can learn again, after the way I was a year ago. I go down on the 7:39 train and get home about 4:30, and do not mind the trip at all. In fact, I seem to accomplish quite a bit on the

train. Two weeks ago, that former employer of mine for whom I worked until I became sick, came to see me and asked me to work for her again. She has offered me a higher salary and some other inducements. I rather think I'll accept her offer, although she has not as yet returned for my answer and she was to come a week ago. However, I suppose there's still time as I wasn't to start for a month or more.

"As far as my social activities are concerned, of course you know they are rather limited. But I do get a great deal of enjoyment out of the choir I now belong to. I just joined it in September. It is the Methodist Church, where a friend of mine is choir director. Nothing has ever given me more enjoyment than a choir rehearsal, and this choir is no exception. I have only missed one rehearsal, (then I had to play at some affair), and I have never missed a Sunday sermon. Last month I did some of the accompanying at the Kiwanis Club show, held for two nights in the local high school. I have had several trips to New York and Brooklyn since I've been home—4 to be exact.

"If I were to tell you of any unpleasantness I've had since my return home, it would just be the pain I've had in my back—from the metrazol, I presume. It bothered me very much during the summer, but now I only have it when I become tired.

"Well, I hope I haven't gone into too much detail with the accounts of my condition and activities, but I did want to tell you everything. I have never regretted going to the hospital even though I did not seem very enthusiastic or appreciative. I thank you for all you did."

This girl has now remained out of the hospital for a period of six years. Her adjustment has been consistently good and she has had no recurrence of her symptoms. It is felt that she can be considered recovered.

NOTE: The author ran a series of six cases including this. The other five were analyzed in conjunction with insulin. One, diagnosed anxiety neurosis, but with hallucinations in two fields, can be considered as recovered after remaining well for six years. A second, a manic-depressive, mixed, has remained symptom-free, but was not considered recovered, as it was felt there was not sufficient change of attitudes and personality. The third, a case of

a very severe compulsive neurosis with three pages of symptoms consisting of obsessions, fears, compulsions, and ruminations and somatic complaints centering on every part of the body has remained much improved, making a satisfactory adjustment. The fourth, a homosexual girl has since been married and has two children, having made a satisfactory social adjustment, but without reaching a full genital level. Her cooperation during analysis was considered poor, but her attitude toward the analyst and hospital since leaving has been remarkably good. The last case, one of dementia præcox of an erotic type, had to be discontinued; and the patient remains in the hospital unimproved.

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A COORDINATED THERAPEUTIC APPROACH TO SCHIZOPHRENIA

Analysis of Techniques Used in One Case

BY LILLIAN KATZ KAPLAN, M. D.

Introduction

Reports of the results of insulin therapy to date have been in statistical form. Frequently, however, investigators have noted, from their clinical experience, that insulin therapy is most effective as a method of making the patient accessible to psychotherapy. Savitt,[1] for instance, speaks of insulin therapy as "suppressing psychotic symptoms," but not in any way changing the patient's fundamental personality structure. He maintains that remissions following insulin treatment are of a tenuous nature, and that the patient may be as susceptible to the pressures of his environmental situation as he was before his illness. Remission due to insulin alone, he concludes, does not improve the integration of the personality. Once the patient is accessible to psychotherapy, however, he can respond to treatment, and can be helped to a greater stability than was noted before illness.

It has been noted by previous investigators that recoveries following insulin shock therapy are similar to spontaneous remissions. Both are characterized by a general understanding on the part of the patient that he has been sick and that his behavior and reactions were abnormal during the acute phase of his illness. But he does not frequently develop psychodynamic insight, and his general level of emotional development without psychiatric treatment is on a par with his prepsychotic condition.[2]

Hence, at the termination of a course of insulin shock therapy we have a patient who is no longer psychotic, but who is no better equipped to meet the responsibilities of life than he was before illness. In addition, studies of the prepsychotic personalities of schizophrenic patients have demonstrated the frequent combination of inadequate personality development plus unusually disturbing environmental strains.* We conceive of a favorable environ-

*Lewis, N. D. C., in a brief review of the research and teaching function of the New York State Psychiatric Institute and Hospital," PSYCHIAT. QUART., April, 1940, writes: "The relation of schizophrenia to environmental and hereditary factors shows that this disorder can best be considered as a disease following the same ecological principles as tuberculosis. It is related directly and positively to age, environment, economic, educational and marital status. It shows clear evidence of an hereditary nature."

ment as a situation which includes friendship, employment, recreation and satisfactory family relationships. All too often these areas of positive satisfaction are limited or absent in the lives of recovered patients. The reason varies in individual cases, but there is usually a combination of external and internal causative factors. On the one hand, we know that, as Lewis notes, "Schizophrenic patients tend to show . . . an inability to resolve family ties and a generalized negative attitude towards sexuality." On the other hand, we are familiar, from a clinical point of view, with the various personality disturbances noted in the relatives of psychotic patients, and the influence these have in complicating family relationships.

The writer submits, then, that in addition to insulin therapy and psychotherapy, consideration must be given to the environment which will be conducive to the patient's well being. This is the area sometimes modifiable by social case work treatment. Psychiatric social workers are specialists in evaluating environmental strains, and in working toward their modification. During the last two decades, they have particularly developed skills in treating family relationships.

One does not pretend that either psychotherapy or social case work treatment can be successful in all cases. Certain conditions are necessary for either one to be effective. Just as in psychotherapy there are criteria which influence the degree of success obtainable (accessibility, rapport, intelligence, desire to improve), so in social case work the intelligence of the parents, the quality of their interest in the patient, the rapport established between worker and parent, economic status, problems in family relationships, and the skill and maturity of the psychiatric social worker, are all important factors affecting success.

Since the importance of other treatment methods combined with insulin treatment has been frequently noted, the writer believes there is value in examining in some detail the technique of such a therapeutic program. As a beginning in this direction, she is presenting one case in detail. She recognizes that the terms "psychotherapy" and "social case work treatment" are broad terms covering a great variety of specific techniques, and perhaps varying with each psychiatrist and each psychiatric social worker. But she believes that if we are to benefit from the experience of others, we

must make these broad terms more concrete by describing the specific methods utilized.

The case presented here was chosen because it illustrates a variety of favorable and unfavorable factors, a coordinated approach, and to date a relatively favorable outcome. The patient, although not a mature, completely integrated personality, has been clear of psychotic symptoms for one year, and at home for seven months. She is making a better social adjustment than ever before in her life.

Unfavorable indications were as follows: The patient's personality previous to illness was not on a high level; her illness was diagnosed as schizophrenia, hebephrenic, and family relations were very poor. On the favorable side, were the patient's youth, good intelligence, and the fact that she started insulin therapy four months after the onset of her first acute illness. In addition, the mother was intelligent, and although this was not evident at first, she was later able to be very cooperative due to her almost frantic concern about the patient, and her strong, positive attitude toward the psychiatric social worker. The economic situation, although modest, was sufficient to carry out practical arrangements recommended by the hospital as being desirable.

History

PATIENT'S HISTORY

This patient was a 21-year-old Jewish girl, a college graduate, who was admitted to the hospital in November, 1939, and was discharged in November, 1940. She had been an unwanted child; and, from the first, her mother had tried to compensate for rejection by oversolicitude to the point of domination. This mother was a competent, aggressive, ambitious business woman. Little is known of the father's attitude, but he apparently occupied a secondary place in the family set-up, competing with the patient and her 12-year-old brother for the mother's affection and attention.

The patient's early development was within normal limits, except for early lack of nourishment. The inadequacy of breast feeding was not discovered until the patient was six weeks old, at which time she had showed no gain. She was then successfully placed on

a formula. When the patient was two and one-half years of age, she had a serious illness, resulting in the mother's oversolicitude becoming more extreme. Apparently for the purpose of getting attention the child developed tantrums, causing further complications. This condition continued until she was five.

From the time the little girl started at school at four and one-half years, her mother acted in a supervisory and repressive capacity. As the child reached adolescence, it was noted that she was restless and slow in completing tasks. Her choice of high school was merely her mother's choice. Even her friends were selected by the mother. The patient was looked upon by her fellow classmates as a "book-worm and a prude." Although she was one of the highest ranking students, she was never admitted to any of the sororities, and she never possessed a close friend. Her spare time was spent in studying. She was meticulous in her habits, and very orderly.

At 16½ years, the patient entered college, again on the advice of her mother. Although she was interested in the sciences, she followed a commercial course, as her mother felt that this would make her self-sufficient and financially independent. Marriage, the mother believed, was second to a career in importance. The patient spent even more time on studies in college than she did in high school, but did not achieve commensurate results. Her grades were C's and D's, which made her feel very inferior. As a result, she spent even more time than before on her studies and completely disregarded social activities. Only on rare occasions did she find herself in the company of young people. It was the expected thing that after a young man had called once or twice he would never return again. The reason was a mystery to both mother and daughter.

ONSET OF ILLNESS

When the patient was graduated from college in June, 1939, the mother procured a position for her in a summer camp, where she was to act as a counselor. It was at camp that the symptoms of her illness first became manifest. There she was attracted to a young man, who, from the patient's description, was apparently immature and narcissistic. He encouraged her to center her attention upon

him. When the relationship approached the point of intimacy, the girl developed somatic complaints such as diarrhea, abdominal discomfort, nausea, vomiting, and an unusual amount of irritability and impulsiveness. She wrote home, telling of every complaint in great detail. Before the camp season was over she returned home. The gastro-intestinal symptoms persisted after her return, and she was taken to a number of physicians, but no physical basis for her symptoms could be discovered.

In September, 1939, she developed a religious trend. Soon she was also preoccupied with thoughts of love; and, as her ideas became more and more marked, her irritability and restlessness mounted. At this time, a physician ordered a basal metabolism, to rule out hyperthyroidism. She misinterpreted this test as being a device for forcing her to keep quiet. Her language became profane, her activity unruly, her habits more careless, and she was finally sent to a private sanatorium at the end of September.

HOSPITALIZATION

At the sanatorium she was overproductive. She recited poetry, discussed her sex life, and gave evidence of responding to auditory hallucinations. She interpreted her confinement as being an attempt of her parents to rid themselves of her. As her productions became more relevant, she slowly lost the marked overproductivity, and the picture changed. She shifted from constant irrelevant, dissociated speech to alternate periods of excitement and quietude. She said:

> I found out too much about life for my own good. I found out too much about eyes. Not for the preservation of the body, not for the preservation of the mind, but just because I am such a damn woman that I see life through my own eyes. Five years of college to learn a hodgepodge of everything. High school. Three poets of the nineteenth century—Byron, Keats, Shelley—one female doctor—one God damn woman.

In November, 1939, the patient was transferred to the New York State Psychiatric Institute and Hospital. Upon admission, she presented many bizarre activities such as grimacing, preoccupation and blocking. Her spontaneous speech during periods of irritability was irrelevant, and she presented the mechanism of echolalia.

> I anticipate the future. Now that I am 21 I am a woman. Twenty-one. I am a woman. That's the trouble. That's the trouble. Men get all the breaks. My private life is my private life.

She was only partially oriented to time, place and person.

After the first three weeks, there was clear evidence of auditory hallucinations, and some indication of visual hallucinations as well. She thought the voices she heard were cursing her and calling her names. At times there was the voice of God telling her what to do. At other times, she heard men's voices. Her affect continued to be inappropriate and silly, and her productions, although irrelevant, were on the subjects of philosophy, religion, poetry, school fears and past love. She began to void on the floor and in bed. When she was placed on insulin control in December, the patient was uncooperative, negativistic, talked a "blue streak" in response to auditory hallucinations, and required close supervision. Soon she became mute, only uttering occasional phrases.

INSULIN THERAPY

In January, 1940, the patient was placed on insulin "shock" therapy—Sakel technique. For two months, she resorted mainly to pantomine as her means of expression. Her mood swing continued, as did her impulsiveness and hallucinations. Her impulsiveness was so intense that continuous tubs had to be resorted to in order to allay any untoward results at the height of her excitement. Her mutism continued even in the presence of her parents who visited her weekly.

Throughout this period, the patient was seen daily by the therapist, and attempts were made to encourage at least superficial contact. The patient, however, continued resistive and preoccupied. She would refuse to reply to the therapist's friendly overtures, or make some such remark as, "Go away. Can't you see that I'm busy?"

In early March, 1940, a week before insulin "shock" therapy was discontinued, the patient showed a remarkable and abrupt change. She became a sweet, lovable person, who was sociable and who encouraged the catatonic patients to "snap out of it." She also expressed interest in her visitors, and was most anxious that a program be planned for her in school so that she could renew her secretarial proficiency.

Concurrent with this change, the girl's relation to the therapist became friendly and polite. The greater part of her first spontaneous discussion, however, centered around hospital life and activities. Since she had only begun to be accessible, her spontaneous productions were accepted, and her program was adjusted to her desires. No attempt was made to encourage more than these superficial discussions for the time being.

After 50 treatments, insulin was discontinued. It was then the consensus that the patient had returned to her prepsychotic level. She had some mannerisms, complained of inability to concentrate, and had no conscious insight into her problems of family and social relationships. Her behavior was submissive to the domination of her mother just as it had been previous to illness. Superficially, she was indifferent toward her father.

PSYCHIATRIC TREATMENT, MARCH TO MAY, 1940

Brief interviews with the psychiatrist continued daily, the therapist remaining relatively passive and encouraging the patient's spontaneous productions. She was concerned about masturbatory activities in which she had indulged freely between the ages of 14 and 16, and she now feared this had been wrong. She was able to accept reassurance in this matter. There was only brief mention of her romantic interest of the previous summer.

Her next concern was her vocational future. Her tendency was to discuss possibilities in concrete terms, speaking of various vocations which might interest her, but in each instance concluding that she was inadequate. She felt that her mind was not functioning well, that "her fund of knowledge was on the wane," and that she did not have innate ability in any field. The therapist recognized the patient's tendency to underestimate herself as a reflection of the pressure exerted by the parents toward concrete achievement. Therefore, the girl was given considerable encouragement. Her abilities were emphasized and her limitations recognized but minimized in importance. The patient responded to this attempt during interviews, becoming more hopeful that she would be able "to contribute her share to the world." Unfortunately, the unexpressed but very evident critical attitude of the parents tended to counteract the therapist's efforts.

The patient hinted at some recognition of conflict with her family. "My mother is the steering wheel. Her arguments always overweigh mine, and, hence, I have always followed what she has set up for me." The day after she made this remark, the patient hastened to explain that her mother really did know best, and that when the patient did not follow her mother's advice she was sure to regret it.

During this period, only indirect methods were used to encourage a more comprehensive discussion of the family situation. A month after discontinuing insulin treatments, week-ends at home were started, and the therapist always expressed interest in the patient's week-end experiences. These were not always very satisfying. The girl complained that her mother watched every move she made and constantly suggested a series of activities. The mother, on the other hand, felt that the difficulty arose from the fact that she was trying to let the daughter decide for herself, as the hospital had suggested. She was sure that if she had felt free to direct things as usual, there would have been less discontent. Once when the patient was encouraged to suggest changes at home which might be desirable, she blocked and evaded, but finally was able to describe her theoretical ideal home as "a place in which all opinions could be discussed calmly without the raising of voices and loss of temper, and where there would be genuine affection between brother and sister without lip service."

At the end of April, 1940, the patient was allowed to spend a four-day holiday with her family. She returned at the end of three days, complaining that she was restless at home and unhappy because she was constantly irritated and confused by her mother's behavior. She appeared more inhibited and preoccupied than formerly. The therapist believed this indicated some regression, but since the patient seemed to benefit from psychiatric interviews, no change was made in her program—in the hope that she could regain her former status. In interviews she was encouraged to examine her reactions to her mother, and she did discuss the current situation in some detail. The patient's point of view was recognized and accepted in an attempt to counteract her feeling of inadequacy. Two weeks later, just two months after ending insulin, the patient, while visiting at home, attempted suicide by drinking iodine. Full

details were not available, but the patient said she wished to die because her memory was poor and she could tell that her parents were not satisfied with her progress because they never let her out of their sight.

CASE WORK WITH MOTHER, MARCH TO JUNE, 1940

At the end of the insulin treatment, return home had been anticipated within a few months. Therefore, the case had been referred to the social service department for work with the family. During the early part of the contact, from March to May, 1940, the social worker saw the mother regularly every two weeks. The worker's approach was based on the concept that the patient's inability to attain the high standards set for her by her parents was one factor in precipitating the illness. It was assumed that if the parents could modify their goals and allow the patient more freedom to develop her own independent personality, she would have a better chance of maintaining the improvement she was manifesting at this time. Continuation of parental domination, it was thought, would work against further improvement, and might be a precipitating factor in the development of another psychotic episode. Since the patient at this time apparently did not fully recognize her own inability to emancipate herself, it was believed that the cooperation of the parents was urgently needed. The mother was the parent interviewed, since she appeared to be the dominating member of the family and had taken the major responsibility for contacts with the hospital.

As the mother was an intelligent woman who had spontaneously expressed her desire to cooperate for the patient's welfare, the approach first used was one of direct interpretation, tempered by some reassurance and expressions of sympathy with the mother's obvious anxiety. She was told that she would have to accept a less ambitious goal for her daughter. It was pointed out that the patient could lead a happy and useful life but would probably not be able to undertake a teaching career, which was her mother's desire. She could do less responsible work at a modest salary, but would not be satisfied so long as her parents continued to urge her to achieve something actually beyond her ability.

There was no attempt at this time to uncover the mother's motivations, or to find out the reasons for her ambitions for the patient. It was known that the mother was a competent, aggressive woman who had failed to achieve her own ambition to become a professional woman. One obstruction to her original plans was the patient's birth. This had interrupted the mother's college career, and she had never completed the work for her B. A.

The mother's response to direct interpretations was to express increasingly her apprehension, self-reproach and oversolicitude, particularly in her behavior. Apparently unaware of her own motivations, and in a state of emotional tension, she took the interpretations as criticism. As a result, she was more intensely guilty and sought to counteract this by centering her attention upon the smallest details of the patient's life. With thinly veiled hostility, she questioned the therapeutic plans of the hospital, recognizing consciously only her desire to "do the right thing." She begged for specific, detailed instructions as to how to behave in the patient's presence, and tended to watch and worry about every detail of the girl's activities during week-end visits. At the movies, she even followed her to the rest room, apparently afraid to let the daughter out of her sight. As already noted, this constant attention irritated the patient, who interpreted it as meaning that her mother still considered her sick.

The social worker did not give specific suggestions as the mother requested, believing that once the mother developed a general understanding she would be able to handle specific situations accordingly. The mother was apparently frightened, fearing that she would "do the wrong thing." In addition, this was perhaps the first time that she had felt completely lacking in self-confidence. The result was that, failing to obtain instructions from the social worker, she consulted one member of the staff after another. She frequently telephoned the psychiatrist and the chief of the service asking for specific information as to prognosis and recommendations. It was clear that she wanted the hospital's promise that the patient would not be discharged until completely recovered, and assurance that there was no danger of a relapse. Complete recovery meant to her, apparently, that the patient would become a competent, outgoing, sociable person.

This type of insistent inquiry, with the accompanying inability to accept reassurance and sometimes even to comprehend interpretations given to her, made the mother appear to be an extremely confused and difficult person. The climax was reached with the patient's suicide attempt, when the mother accused the hospital, and particularly the social worker, of not warning her of such a possibility. Actually the girl's condition had been thoroughly explained to the mother by the staff physicians.

During this period, and accompanying the regression of the daughter, there was, then, intensification of the mother's anxiety. The approach chosen by the social worker did not relieve the mother and may have served to increase the pressure she was apparently reacting to, namely a strong sense of guilt.

AMBULATORY INSULIN

Following the suicidal attempt, the patient presented many somatic complaints, and psychotherapy was found to be unsuccessful in combating her continued regression.

At this time, there was considerable interest in the experimental use of "ambulatory insulin,"[3] and it was decided to try this method. The patient was still in touch with reality but rather preoccupied, and it was hoped that she might be more able to utilize psychotherapy during the period of mild hypoglycemia. Other indications for the experimental use of this therapy were her tendency to vasomotor collapse with coma doses, and her great dislike of that form of treatment. As noted in other cases,[3] she showed no immediate change. Within the next two weeks, she handed in two notices of her decision to leave the hospital, and retracted both. In the meantime, the girl continued indecisive and dissatisfied with herself. Her mannerisms became so obvious that they were also noticed by other patients.

Interviews continued daily during the period of hypoglycemia, and the patient continued productive. She constantly implored the therapist to tell her "concretely" just what the trouble was. These questions were turned back to her with the explanation that she was attempting to put the therapist in the dominating mother rôle. References to her own productions were used to illustrate this, and the fact that she would revolt, as she had against her mother, if

concrete suggestions were to be given. For the first time the girl was able to admit tentatively a relationship between her illness and her family situation when she said: "Can't you do something with my parents in order to modify their habits so that I can make a better adjustment?" Here the therapist agreed that family attitudes were important, and interpreted the purpose of the psychiatric social worker as aimed toward preparing the family for the girl's eventual return home. After handing in her first notice, the patient inquired whether she was acting rashly. She was told that she had not yet developed sufficient understanding, that she did need further hospital care, and that if she left it would be without the approval of the hospital. She promptly retracted her notice. Her indecision, however, was so great that within a few hours she gave notice again, and retracted it four days later, only after a great deal of pressure from her parents. The therapist did not exert pressure on the girl, but the parents were informed by the hospital that commitment would be advisable if the patient refused to remain voluntarily.

Indications were that the regression, the suicide attempt, resistance interviews, projection of blame on the family, and attempts to leave the hospital were all unconscious efforts on the part of the patient to evade the pain of recognizing and attempting to handle her real conflicts. These, as in other schizophrenic patients, centered around her difficulties in emancipating herself from family ties and in developing a satisfactory heterosexual adjustment. Even weekends had shown her too vividly her inadequacy in these areas, and she had tried to escape, first back to the hospital from her family, then from life, and finally from the therapeutic situation itself. Her attempts to escape were thwarted by opposition from her family, by the therapist's consistent pointing up of her problems and encouragement to face them, and by the effect of the ambulatory insulin which eventually facilitated verbalization of her problems. In addition, there were positive satisfactions in her developing relationship with the therapist and in recreational trips with the psychiatric social worker, which were introduced at this point.* It will

*For more comprehensive description of this type of treatment see Hayes, Mary-Ellen: Case work with adolescent patients. PSYCHIAT. QUART. SUPPL., 16, 1:31-38, January, 1942.

also be seen later that the patient reacted favorably to the gradual change in the mother's behavior, which resulted from continued case work.

CASE WORK WITH PATIENT, JUNE THROUGH OCTOBER, 1940

From June through October, the patient and social worker spent one afternoon weekly in a recreational activity of the patient's choosing. These activities included shopping, museum trips, walks, movies, tennis and swimming. At first, she was fussy and preoccupied. It was only with great effort that she could make the smallest decisions. The purchase of one article consumed visits to four stores in four hours. The decision as to traveling on a bus or by subway involved 10 minutes of pondering, with frequent appeals to be relieved of the necessity of making a decision. The social worker, free from the personal reactions of relatives and equipped with theoretical knowledge, could maintain a consistent attitude impossible for a layman in such a situation. She made only rare suggestions, and these brought an immediate negative response from the patient. For the most part, the patient was told that these were her trips to do with as she pleased. After the first month she was able to plan the activities in advance, and showed less tendency to fear that she had made a wrong decision. From that time on, rapid progress was noticeable. On July 23, she said, "I wish you wouldn't always agree. I wish you would make some suggestions." The worker's remark that this might be easier brought an immediate response: "I suppose I feel that way because I am used to my mother, who has always decided everything. I find it disconcerting to have to make up my own mind." Her ability to make decisions, her span of attention, and her interest in things outside herself all showed marked improvement. By September she had become a vivacious, interesting companion.

PSYCHOTHERAPY, JUNE THROUGH OCTOBER, 1940

After a month of ambulatory insulin, the patient seemed to be in better contact with the environment and her associates. She confessed that many problems came to her mind which she would like to discuss with the therapist, but said that she could not get herself to speak about them. It was suggested that she write

these thoughts. Following, are excerpts from her early writings, which describe her struggle to decide whether it was worth while trying to recover.

June 13, 1940—"Is it unnatural for me to have lost feeling for my parents? Sometimes I think my fondness for them sprung from the fact that they supplied my needs and my constant association with them. Ought they to chalk me up to bad debts—or poor capital investment?

"My subconscious mind wants to give up the struggle. Maybe it feels that since my parents were the ones who determined my career and expected so much from me. . . . It was all their mistake in planning work for me which I felt I couldn't execute. Unconsciously I am putting the blame on my parents . . . My subconscious mind is trying to make an idiot out of me. It won't let me remember the motion pictures that I see or the stories I read.

"And yet at the same time I have a sense of obligation toward my parents for what they've given me and I seem to be trying to evade it by losing my memory."

June 14, 1940—"I am up a blind alley. My mind won't reason. It doesn't want to. Conscious and unconscious blocking?

"I'd like to burst the bands that are binding me but I feel so impotent. I feel almost as though it were something physical holding me down. Yet it isn't quite tangible and I seem to have reached an impasse. Maybe I'm rationalizing—Would I like to have it physical? It's so much easier to escape with physical than with mental difficulties."

June 15, 1940—"The trouble is that my mind is resistant because I can't have the kind of life my parents planned and which seemed so delightful—the life intellectual. I don't want anything else. I can't seem to accept the compromise. I just can't seem to struggle any longer. I want some one to tell me what to do. I am like a baby crying for things I can't have and refusing a compromise.

"My mother says that she and my father live for me and my brother. We give meaning to her life. Am I supposed to live for my parents? That's no reason for going on living is it? And yet for myself—to struggle back to mental health—I just can't go on. Something down inside tells me that I died."

June 16, 1940—"I don't want to go on. Yes I do. No—yes—no—yes—Do I care? My mind is blank—The only thing I can think of wishing for is getting well. But I don't know what to do about getting well. That's the whole trouble. What I need is a good shaking out of this apathy. I wish some one would give it to me."

June 19, 1940—"I do care about getting well. That's the trouble. Then I have to get back and clean up the thoughts in the back of my mind about that summer when I was seventeen . . . So where do I go from here? Back to X.—Another attraction. We kept company. Did I do right or wrong? I hesitate to go on probing. Why? Love? Yet only two weeks acquaintance. Why does my mind stop here? Come on now, that attraction was mental. I am afraid I got that attitude from my mother. I just accepted it. As to ideas of my own on the importance of love in a woman's life—I didn't form any opinions of my own yet. . . . In the matter of my future . . . I always absorbed ideas from my mother as to what I'd like to do. I don't know. Except that I don't want to stay home and keep house."

June 20, 1940—She said, "I'll try hard to be more productive and help myself as time goes on."

June 30, 1940—"In speaking of my phone call my mother said 'I get excited when I hear your voice over the phone you know.' Such a remark made me feel guilty because I feel no equivalent emotion. I feel that I am a very selfish daughter. . . .

"If I so much as yawn, my parents remark upon the fact that I am tired and with a note of alarm in their voices suggest that I return to the hospital . . . I think, subconsciously, my father is glad I am away because then he has more of my mother's attention . . . I wish my mother would not treat me like an invalid, always worrying about my eating. Maybe she thinks my mental illness is such that I have lost my ability to know when I feel like eating."

In brief daily interviews, the contents of these writings were reviewed. The therapist continued passive and friendly, but encouraged the patient to feel that it would be worth while to recover, and that she could do this by facing the facts of her situation. In time she would have ideas of her own and be able to live her own life.

As the patient's improvement mounted, she was able not only to write her thoughts, but to read them to the therapist, and, finally, to speak them without writing. She talked increasingly of her dissatisfaction with her parents, particularly her mother. She wished that her mother would not become so emotional in every discussion. She objected to scenes to such an extent that she found it impossible to stand up for herself. Her "nervous diarrhea" of the past year seemed to her to have been an attempt to escape from working in the same office with her parents. She thought her fear of marriage was tied up with fear of arguments such as her par-

ents had. "I never developed as an individual because I was too absorbed by the family." The patient showed an ability to recognize her own rationalizations, and tried to get behind them to the basis of her problems.

In July, regular interviews three times weekly were substituted for the briefer, more frequent ones. By this time it was not necessary to confine interviews to the period of hypoglycemia, as the patient could talk freely at any time. She continued writing, using her notes as a basis for interviews.

July 8, 1940—"My erroneous ideas about the doctors who attended me were due to the fact that I was starved sexually. During the summer I repressed my physical attraction for X to the utmost, not even a kiss.

"Is petting in moderation wrong? Should I have indulged with X to whom I was so strongly attracted? Would that have prevented those wrong notions of mine about the doctors? Even though I later learned that X was a weakling and a philanderer for whom I could have no respect? I did express my attraction to Y through a little necking and later felt cheapened and humiliated when he did not call again. That is why I refused X. I feared a repetition of similar circumstances. I told my mother about necking with Y and she thought I had done very wrong."

July 9, 1940—"I had the desire to jump back into bed and go to sleep again. I feel as though the desire is an expression of the wish to escape facing the problems confronting me."

At the end of July, the patient, for the first time, announced her new discoveries to her mother: "I told her I did not care to have her anticipate my ideas as I would like a chance to think for myself." Already relieved by her discussions with the case worker, the mother was able to accept this rebellion with a minimum of protest, a fact which greatly encouraged the patient. The patient, however, still felt "divided within herself." Part of her still yearned for the comfort of her mother's direction, while the other part rebelled.

During August and September the patient centered her attention upon her submission to her mother and the effect this had on her social relationships.

August 12, 1940—"After dancing—It was after the evening was over that I realized how important young men are to my having a good time. I tried to absorb myself in my work while I was at college and sublimate my inter-

est in the opposite sex, but it certainly did not work out very well. My interest in young men accumulated during those college years until it finally overwhelmed me.

"I feel that my mother thinks about the things I tell her and comes to see my point of view in many of them. I feel that now her attitude is changing as a result of her talks with the social worker, and that in the future she will act differently. My mother told me that she feels her conversations with the social worker have given her a new perspective on our family relationships."

August 20, 1940—"My mother was over-solicitous because she wanted me to remain dependent on her for managing my affairs, because it gave her a feeling of superiority to be needed so much. She didn't want me to learn to do without her. All people like to manage. The mastery motive is really an expression of the desire to be superior to others."

August 27, 1940—"When I spend the day alone with my parents I feel as if I don't have a distinct personality of my own. I feel as if my personality were subjugated to my parents' initiative."

Gradually the patient's previous productions were utilized increasingly to help her understand the significance of the material she presented, and free association was encouraged. In September, the therapist became more active in stimulating a full discussion of family conflicts, beyond the patient's spontaneous comments. The patient's interpretations were accepted, however, and never questioned. Since she was struggling to develop ideas of her own, it seemed inadvisable to point out her inaccuracies, forcing her to face the limitation of her own understanding. It seemed that this might be too great a threat, and it was anticipated that eventually she would be able to develop a realistic perspective.

During this period, the patient's external behavior improved and she learned to handle practical situations adequately. It was believed that the trips with the social worker supplemented psychotherapy in this respect. Week-ends at home were reinstated in September as part of the readjustment program.

In late September, the patient announced jubilantly that she was releasing herself from her mother's domination. She had been able "to pet" without "qualms of the conscience," and enjoyed it, and had not told her mother "who wouldn't understand." This same day she first spoke freely with the social worker about the problems in family relationships and her resultant feelings of inade-

quacy. This was taken as an indication of increased security, since up to this time she had talked fully only with the therapist.

On October 1, ambulatory insulin treatment was discontinued, after 123 injections. The total number of units was approximately 3,400 over a period of four and one-half months. In other respects, the treatment plan remained the same for the last month of the patient's hospital residence. Apparently she had reached a stable adjustment, since there was no reaction to the discontinuance of insulin. Her last month was spent in completing future plans, as described in the following, and the patient assumed responsibility for making appointments, investigating possible positions, etc. She was discharged from the hospital, after one year's residence, on November 1, 1940.

CASE WORK WITH THE PATIENT, SEPTEMBER AND OCTOBER, 1940

During July, the patient had spoken to the social worker, in vague terms, about her uncertainty in regard to her future life and the necessity of clearing up certain problems before she could take any practical steps. In late September, she announced that she was now ready to take concrete action. In explanation she told the worker, for the first time, of her mother's domination resulting in her own feeling of inadequacy: "I feel that I must attain financial independence in order to be an individual in my own right." She had decided to do office work because it was a familiar field, in which she would not feel utterly inadequate. She was determined not to return to the office of her parents: "It would be too easy, and I might slip back under my mother's domination."

During October the recreational trips continued, but the girl utilized them for discussion of her practical plans, and she received considerable concrete assistance. This was in the form of information about resources, discussions of the pros and cons of tentative plans, etc. The patient's first step was to take vocational tests. She was found to have good clerical ability, and this reinforced her own plan. She was impressed by the vocational bureau telling her that she would have to make up her own mind as to what she wanted to do, and should not expect the bureau to plan her future for her. It struck her that this same opinion must be held by the therapist and the social worker, for neither one told her just what to do.

The next step then was to develop some ideas of her own. She decided to attend business school in order to get back her old skill and to be available for a position in the near future. Remembering how she had given up a scientific career against her own desire, she decided to plan for an eventual evening course in laboratory technique. This possible future goal was a great encouragement to her, particularly during the time when immediate plans were still uncertain. Eventually she gave it up, when she discovered that she really did not want to be an intellectual person.

CASE WORK WITH THE MOTHER, JUNE THROUGH OCTOBER, 1940

There was a change of social workers in the middle of June. From this point on, case work with the mother was based on the concept that her behavior toward the patient was an expression of guilt, probably related to her original rejection of the patient, and that this sense of guilt would have to be considerably relieved before she would be able to mobilize her strength sufficiently to help in treatment plans. Since direct interpretation apparently intensified her problem, the new worker, from the first, assumed the rôle of a responsive listener. Her main activity was to try to grasp what was behind the mother's words and behavior, and then to help the mother verbalize it. Occasional questions or restatement of what the mother was struggling to say, brought a ready response. Specific advice was occasionally given when the mother requested it, for she was obviously too upset to feel secure even about small matters. This need diminished as the mother's self-confidence returned.

One of the most important factors in the case work was the worker's recognition, both in her attitude and in her words, of the mother's positive qualities. The worker realized that the mother was a competent, intelligent woman, who was very anxious to do anything she could to help her daughter. Her confusion and turbulent emotions had obscured temporarily her real competence. However, it became evident as time progressed that the mother had unusual ability to respond to case treatment. The early recognition of her potentialities was appreciated by the mother, and she responded with a strong, positive attitude toward the worker. This in itself was therapeutic for several reasons. The mother eventu-

ally felt free to express herself without fear of criticism and she was enabled to take over intuitively some of the worker's attitudes. Finally, she came to accept a great deal "on faith," even matters she did not immediately understand.

From the beginning, the mother was continuously preoccupied with her extreme sense of guilt, and in this connection she presented a great deal of material. When she had discovered that the patient, at six weeks of age, was starving, the mother had reproached herself. Ever since then she had felt that she must "make up" for her delay in recognizing the difficulty. She felt very responsible toward her children, but never loved them; so she "made up" by extreme caution in regard to their physical care. Her real affection went to her husband, and her real interest was centered upon business. In retrospect, she felt that she had actually neglected the patient, and she feared that her lack of love had caused the patient's illness. In line with her strong sense of responsibility, she found it almost impossible to bear seeing her children disappointed. She would go through endless manipulations to keep them from making mistakes, for fear they would be disappointed. When the patient, a passive, inadequate child, asked for advice and direction, the mother always gave it.

By the middle of July, after this much had been expressed, the mother noted that the interviews provided a temporary feeling of relief, and that she had not felt pressed to talk to the doctors for three weeks: "I seem to be satisfied with what you tell me." For the first time, she was able to grasp an explanation of the causes of mental illness, and the next week reported previously unknown information about two cases of mental illness on the paternal side.

Her anxiety spread to other aspects of the situation. She was afraid to resume week-ends at home for the daughter for fear of another suicidal attempt, although the patient had improved greatly. She feared the girl's refusal to remain in the hospital and assumed that in such a situation the hospital would "have nothing more to do with her."

The mother first recognized her drive to dominate, after the patient angrily explained this to her late in July. With surprise, the older woman revealed that consciously she had only meant to make suggestions, not to control. Two weeks later she had already begun

to stifle her impulse to give advice, and explained her drive as related to her inability to allow her children to make mistakes. It later developed that she feared mistakes would make the patient unhappy and a relapse might result.

Her attempt to "leave the patient alone" was a constant struggle for her. Intellectually, she became convinced of the desirability of following this course of action, particularly as she saw the patient becoming a little more independent; but the effort precipitated considerable anxiety. She felt as if she were under a constant strain, and in this connection gave a description of her rather diffuse compulsive ritual, utilized to avoid continuous anxiety. If the children failed to eat one meal she knew it would not hurt them, but it stimulated great apprehension and, to relieve herself, she had to insist on their eating. This pattern she connected with a life-long feeling of imminent danger and fear of failure. She could not bear to be in doubt. This explained her previous insistence on exact information from the doctors, for she could not accept their statement that "We must wait and see."

Next came brief material on her early life. The youngest of 14 children, she asserted she did not resent her mother's indifference to her; but she seemed to be resentful toward her father, blaming him for the early death of an older sister. When she was 11, she had felt keenly the departure to America of an older sister who had mothered her. She struggled for an education against the opposition of her family, and came to America at 18 years of age to attend a medical school, having been unable to enter one in Russia. Blocked by financial limitations, she took a course in accounting at night school. She considers her career a failure because she could not complete her education, and her husband a failure because, in spite of his professional training, his income is modest.

Happiness, as the mother conceives it, consists of self-confidence and a goal to work for. She was happy until the patient, as an early adolescent, did not make friends. At the same time, the mother first recognized her husband's inadequacy in business. From then on, she felt that she could never attain happiness except through the lives of her children, and felt very strongly the necessity for the patient to have a successful career.

Early in October, the mother confessed she could not be satisfied with the patient's limited ability. "It is wrong to put all hopes in one child, but that is what I have done." She burst into tears and fled from the interview, but the next week expressed more clearly than ever her feeling of guilt. The worker's reassurance, she said, did not seem to relieve her strong sense of responsibility. She reproached herself because she had failed to recognize the patient's early symptoms, at a time when preventive treatment might have been arranged, and because her own behavior had been "all wrong." She used to think that her feelings were a reliable guide for her behavior, but now she was questioning her own motives, realizing that her feelings were inappropriate; and she consequently was under a constant strain trying to control her behavior. Her over-protection, she believed, was a selfish thing, designed to assuage her guilt. When her family praised her competence and altruism, she felt "like a hypocrite." It was only in discussion with the worker that she could relax, and be frank and honest.

This was a difficult transition period for the mother, but eventually she came to feel that she had "won a victory" each time she refrained from giving advice. She was quite aware of her dependence on the worker, saying that often things puzzled her during the week and that she delayed making a decision until after an interview. When she could report progress she felt "like a child who wants to be praised."

It was believed that the new rôle of consciously controlling her behavior was satisfying to the mother, in that it was a sufficiently difficult rôle to absolve her from some of her guilt. She did need the constant support and encouragement of the worker, particularly during periods of discouragement. Once she said that the patient might be better off without a mother than with such a poor one.

By the end of October, it was believed that the mother's guilt was considerably lessened, and it seemed possible that she was approaching the point where she might be able to allow her children to live their own lives. It was anticipated that in time she would find it less of a strain to control her impulses, and that she might eventually become more tolerant toward herself.

PSYCHOTHERAPY, NOVEMBER, 1940, THROUGH JUNE, 1941

Following her discharge, the patient continued regular weekly interviews of one-half hour each. She continued to be productive, describing her vocational experiences and plans, her recreational activities and contacts with men. The greater part of her time, however, was spent in discussing her conflict with her mother and describing at length her own attempts to assert herself. Actually, the patient's "independent" behavior appeared more like negativism. She would not accept any advice from her mother, but did react realistically to the advice of adults outside the family. At first, no attempt was made to show the patient the extent to which her behavior expressed over-compensation for her own inadequacy. She was allowed to continue utilizing the therapist for support, and would often try out her opinions on the therapist before announcing them to her family. Since she had only recently allowed herself any rebellion, it was believed that she needed a period of overt expression to negate her previous dependency, and that this would be a step toward her goal of becoming "an independent individual." By March her behavior was causing considerable tension in the family. Since she had maintained her improvement, interpretation of the real situation was no longer considered a threat, and the therapist began gradually to point out to her the meaning of her behavior. This was continued throughout the remainder of this period.

There were periods, while the mother was seeing the social worker regularly, when the patient reported an improvement at home. At these times her manner was freer, more relaxed and more vivacious. Apparently the idea that her mother was also making some effort to change consoled her. It was also true, however, that the mother obtained at least temporary relief from her constant anxiety, and for short times after her interviews with the social worker she would be more relaxed. When the conflict at home was severe, the patient appeared wan, listless and slightly preoccupied. At these times the mother reported a transient return of mannerisms, diarrhea, and considerable fatigue.

The extent of the patient's progress is illustrated by the following three dreams in May:

1. This illustrates her use of the therapist in her fight to free herself from her mother.

"I was growing radishes, tomatoes and scallions in our back yard. My mother was picking the tomatoes which were up, but which had blemishes. I told her I'd like to send some of the vegetables to Dr. L. to show her what I had produced in my leisure time. My mother answered that such vegetables were cheap enough to get in the stores and there was no reason to send them. I repeated again that I wanted to send them to Dr. L. because the vegetables were the product of my creative effort in my leisure time. I thought to myself that this method of recreation was better than reading because it left no after effect of headache. My mother gathered up the vegetables she had been picking and went up the steps to the kitchen."

2. This gives an indication of normal libidinal development.

"I was in a cafeteria with this ex-boy-friend of mine. And then he got to acting very affectionate towards me. We were with other people. I got very angry and left. Then I walked back and said to him, loud enough for the others to hear, 'I find you very unattractive physically and I can't bear to have you touch me.' Then I walked away, but I was faced with the problem that my escort had my check. One of the waitresses, who had seen the row, helped me out. She told me to take a check from the box and look at the clock at the same time and I wouldn't be noticed. I did that and got myself another check.

"Just as I was about to leave I met Jack and he said, 'Come on baby, I'll treat you.' So I went with him. In the meantime the place had turned into one where alcoholic beverages were sold and there were women of doubtful reputation to entertain the men. I walked behind the young man and we passed the table where my other boy-friend was sitting and I thought to myself, 'Now he'll see that I have another date.' We also passed a table where Adolphe Menjou was sitting. The marks of dissipation showed on his face, and to clinch matters he was in a drunken stupor. My escort and I went to a certain part of this cafeteria where motion pictures were shown. We were the only ones there. Jack sent an attendant to fetch his friend (who happened to be Adolphe Menjou). In the meantime he put his arms around me. There was a slight conflict within me, and then I decided to follow the line of least resistance and to permit his embraces. The four negro women, nude to the waist, brought in Adolphe Menjou. One of the male attendants of the place made me leave. He said that a young girl like me shouldn't be in such a place and indulging in petting. And as I left by myself I thought, 'Oh why do men want my body, oh why?' . . ."

3. This dream indicates continued conflict about independence, and a desire to escape the struggle by returning to the hospital.

"I dreamed that I was in a hospital for the mentally ill. My mother came to see me and I screamed and shouted and stormed. I was supposed to go home from the hospital. The attendants at the hospital felt that I wasn't well enough to go home. My mother wrote me a card saying that she would be miserable if I didn't come home. I was talking to one of the persons who worked at the hospital and she was trying to find out how I felt about things. I said I was not unhappy at the hospital. In my mind there was an important distinction to the fact that I used two negatives to express how I felt instead of the positive. To have said I was happy at the hospital would not have indicated exactly the state of my feelings.

"My brother was in the dream too. I think he was at the hospital but I can't remember what part he played. The dream as a whole was very vague and incoherent.

"I also dreamed that I was placed in a strange situation by a person in authority and my reactions were carefully observed. It took me 75 units of time to complete doing whatever the situation called for, and it was considered that I was neither very slow nor very quick in getting done."

In discussing these dreams and others, the patient was encouraged to form her own interpretations and to utilize free association toward this end. Ordinarily she was able to understand them with a minimum of assistance from the therapist.

On several occasions, the patient asked how long she must continue under treatment. Implicit in these requests, was her desire to prove to herself and to her family that she was completely well. Also involved, was her occasional transference to the therapist of the revolt she was enacting toward her mother. In May, this tendency was interpreted to her when the therapist advised her to continue treatment, and she accused the therapist of being "dominating."

Soon after this, the patient spoke, for the first time, of her relation to her father. She admitted that often she hated him and felt she would like to choke him, for he was self-centered and not considerate of others. Her mother, she said, was at least making an effort to understand and was keeping regular appointments with the social worker to this end, but her father was quite unsympathetic. At this point, the therapist explained that the patient still

had many problems to consider. For a year, she had been primarily concerned about her relationship to her mother. It might also take some time to work out her relationship with her father. Following this, although she still had many complaints about her mother, she expressed increasingly her dislike for her father. This seemed to be based partly on competition with the father for the mother's attention.

Upon completion of her business course, the patient spent a month actively looking for work. At first her lack of success intensified her feeling of inadequacy. The result was increased irritability at home and some increase in fatigue. The therapist encouraged examination of the reality situation and continued to emphasize the patient's real potentialities. The result was a decision on the part of the patient to improve her secretarial skills further, as she believed she was not quite ready to take a position. This decision precipitated further conflict with the mother. The latter could hardly bear her fear that the patient would never work, and in order to relieve her own tension endeavored to push the patient toward employment.

CASE WORK WITH THE PATIENT, NOVEMBER, 1940, THROUGH JUNE, 1941

The last month in the hospital and the first month at home, the patient spent in completing her plans. Inexperienced in assuming responsibility for her own life, the patient needed to collect considerable information before making each decision, and she discussed the pros and cons of what she had learned with the social worker during weekly interviews. She did take the initiative in making these investigations herself, and visited a large number of business schools before she made her selection and started her course six weeks after her discharge from the hospital.

Although she did not ask the worker to decide for her, she utilized the worker's approval of her decisions to counteract her own uncertainty. "These discussions clarify my point of view and often new ideas occur to me as a result." The worker continued to say little, but indicated warm interest in the patient and approval of her activities. Occasionally, by a comment, she might stimulate an elaboration of what the patient was trying to express.

After discharge it was at first difficult to evaluate the mother's

reports, for the latter was apprehensive and constantly looking for signs of regression. The worker's contacts with the patient, however, provided an opportunity for direct observation. Actually, the patient's general behavior after discharge showed a marked improvement. The mother's reports, therefore, could be interpreted as exaggerations based upon her own great anxiety.

Six weeks after discharge, the patient was asked if she felt any tendency to "slip back under her mother's domination." She replied, "There is no longer any danger of that. I find that I have changed a great deal as a result of my hospital experience. The new self is now an integral part of me and I have no fear of losing it. My parents do not seem to appreciate the change in me, but, figuratively speaking, I have cut the umbilical cord."

When the mother was not keeping appointments during January and February, the patient reported to the worker as well as to the therapist the increased conflict at home. This was interpreted as the patient's attempt to show the worker the seriousness of the home problems and to ask indirectly for help.

During the ensuing months the patient continued to discuss the pros and cons of practical decisions, usually coming to a conclusion by the end of the interview. In March, she announced that before her illness she had never thought about what kind of a person she was. "Now I realize I am not intellectual. I do not like to study hard, and prefer to have fun."

During April and May, the patient saw the worker less frequently and for only brief interviews. She seemed to be drawing away from contact and finally said that she would plan to keep in touch with the worker by letter, but would not come in for interviews unless she had something definite to discuss. During this period, the mother was again coming for regular interviews, and the conflict at home continued, with the patient projecting all the blame for her difficulties on the mother. Since the mother frankly enjoyed her interviews, it seemed possible that the patient identified the worker with the mother. With the patient's increasing confidence in her own ability to handle practical matters, and the resultant lessening of her need to depend on the worker, it seemed possible that she was freer than before to follow her negative impulse and draw away from the worker. Her decision was accepted as an indi-

cation of her drive for independence, and, in addition, because it was believed that agreement from the worker on this point would facilitate the patient's utilization of the worker in the future.

In June, a few weeks later, further evidence of her identification of the worker with the mother was given. The patient asked for an appointment immediately after a brief conversation with her mother had upset her. In a rather long interview she was obviously practising on the worker the arguments she intended to utilize with her mother. The worker accepted the validity of the patient's point of view, and again emphasized the patient's right to run her own life. However, the worker was more active than usual in interpreting the mother's point of view, and indicating the possibility that the patient might have to make decisions without her mother's full approval. A later interview with the mother indicated that the patient was following the suggestion of keeping some things to herself.

Throughout this period, the worker's aim was to help the patient to see the reality situation, in so far as she was able to do so. It was always necessary to make allowances for her inexperience, immaturity, and the radical changes she was undergoing. Material discussed was only that which the patient presented spontaneously. She never discussed her heterosexual adjustment, and only spoke of the family conflict at times when it was most extreme.

CASE WORK WITH MOTHER, NOVEMBER, 1940, THROUGH MAY, 1941

The patient's return home precipitated an increase in the mother's anxiety. She was constantly fearful of a relapse and felt increasingly uncertain about her own behavior. The resulting tension counteracted her carefully built up "control" and she again evidenced her pattern of domination. Unfortunately the mother's own health, combined with a series of domestic and business crises, interfered with her regular interviews. She was seen once in November, twice in December, and not again until February. At this time, since the patient showed some symptoms apparently related to her extreme conflict with her mother, and the mother seemed to have delayed making an appointment, the case worker finally insisted that interviews be resumed. A few weeks later, there was another interruption due to the brother's illness, but this time the mother returned without a reminder.

During the first interview in February, the mother recognized her need for continued support. "I guess I am fooling myself and I am still trying to control." "I need you to remind me." She also explained her difficulty in resuming appointments. "When I have your sympathetic ear, I lose control and weep. That disturbs me, so I keep delaying. I need to have you tell me I must come." It then developed that there were some realistic reasons for the pressure the parents were putting on the patient to work. They had incurred considerable indebtedness for the patient's care, there were recent unexpected medical expenses for the mother, and the mother's health was such that there was some question as to how long she would be able to continue working. In spite of this, the family had borrowed money for the patient's business course, which had been recommended by the hospital as a transition experience.

It was not until April that the mother was again able to allow the patient relative freedom. At this time the mother made two important revelations. The first was her own discovery—that she was so closely identified with the patient that her own moods were completely dependent upon the patient's moods. She wanted the patient to be happy so that she could be happy. This attitude, she felt, was selfish and wrong. The other discovery was that the difficulty in her relationship with the patient was not all due to the mother. Even when she stopped trying to advise and control, the patient continued to interpret every remark as "domineering." The mother was considerably relieved after this discovery. It occurred to her spontaneously, and its significance was then pointed up by the case worker. This led to the conclusion that the patient, still young and insecure, did need adult guidance and could take it from others but not from her mother. Within two months, the mother found that she was no longer under a constant strain, and that it was rather a relief not to feel that the patient's life was her responsibility. An indication of the validity of this change was her final ability to leave with the patient the decision about future psychotherapy. After one argument, she gave up discussing it with the patient and tolerated uncertainty for several weeks.

During this same period the mother reported her own realization that she tended to be overanxious, and now had developed a habit

of "talking herself out of worrying" by reminding herself of reassurance given at intervals by the worker. She felt more confidence in herself and really came to believe that if she followed the hospital's advice she would be doing everything within her power to help the patient remain well. She was able finally to come to interviews without experiencing anxiety symptoms, as had been the case up to March. Small events, however, still precipitated anxiety, and she continued to utilize her relation to the worker for support, reassurance, and an opportunity to develop further her own understanding. Actually, when she was not feeling acutely anxious, the mother could work out of her own confusion through verbalization, and needed help from the worker only when she had difficulty in expressing what she wanted to say. In addition, she reported that interviews were her only outlet for complaining about the patient, and it was believed that the hostility dispelled in this way made her feel more at ease when at home.

Conclusion

The writer has presented the treatment approach utilized in a case of hebephrenic schizophrenia. The patient, a 21-year-old college graduate recovered from her acute illness following a course of insulin treatment, Sakel technique. She was no longer hallucinated, knew that she had been ill, but had no understanding of the emotional conflicts which had acted as precipitating factors, namely inability to emancipate herself from dependence on her parents and to form satisfactory heterosexual relationships. Two months later, she showed indications of regression and she attempted suicide. Her illness, her suicidal attempt and her attempts to leave the hospital were interpreted as attempts to escape facing emotional conflicts which seemed to her insoluble.

Placed on ambulatory insulin, she began for the first time to examine her problems. At first she could only write her thoughts during the periods of hypoglycemia. Within a few weeks time she was able to verbalize her problems, and in six weeks she was talking freely at any time of day. A month later, she expressed criticism directly to her mother. After four months of ambulatory insulin, psychotherapy, and social case work, the patient had developed considerable insight and was able to handle practical mat-

ters satisfactorily. The mother, too, had progressed, and it was noted that the mother and patient each reacted to changes in the other.

In the first eight months after the patient was discharged from the hospital as "much improved" she maintained her improvement. During this time she completed a business course and acquired experience in a number of temporary positions in connection with the course. On her own initiative she took retraining in speech, a short course in radio operating in connection with defense, and also made an active effort to meet new friends through clubs, the city playgrounds, etc. During this period the patient struggled with the special problem of her relation to her parents and endeavored to prove her own adequacy and become an independent person. She attacked these problems actively, utilizing the therapist constructively.

From 1941 to the present time, the patient has been seen and interviewed on the average of twice a month. She passed a civil service examination and is now holding a civil service position, doing typing and stenography. She has been promoted twice. Apparently she is making a good adjustment with the people in the office. Her social life has continued to be productive. She is reaching out at all times for new contacts and at present is showing a good sense of discrimination and ability to weigh a problem as is shown by the following extract from a recent letter: "Just scribbling a note to tell you that the boy proposed to me over an ice cream soda, and I told him that I couldn't contemplate marriage to him when he had to leave in a week or two."

Of greatest importance in the treatment method of both psychiatrist and psychiatric social worker was the noncritical acceptance of the patient and her mother at each stage in their progress. Both were able to respond because they were intelligent, had considerable verbal facility, and developed strong, positive feelings toward the therapist and case worker, respectively. In addition, the mother had a great need to help the patient, and the patient made a real effort to solve her own problems, once she had decided to do so.

The work of psychiatrist and social worker was closely coordinated through frequent conferences, and was based upon a common point of view and common treatment goals. Both based their un-

derstanding and orientation on the psychoanalytic theory of human motivation. The therapeutic program was one of combined medical, psychiatric and environmental treatment, geared to the potentialities and limitations of a hospital set-up and to those of an extremely disturbed patient and family situation.

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THE EXPECTATION OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, 1920, 1930, 1940

BY BENJAMIN MALZBERG, Ph.D.

The most striking phenomenon shown by the statistics of mental disease is probably the increase in psychoses with cerebral arteriosclerosis.[1] Admissions with such disorders to the New York civil State hospitals were first reported in 1912, and in that year they constituted 2.9 per cent of all first admissions. In 1920, these psychoses represented 7.8 per cent of all first admissions. In 1930, they included 14.3 per cent of all first admissions; and, in 1940, the relative prevalence had increased further to 19.9 per cent. There was a corresponding upward trend in the number of first admissions with such psychoses per 100,000 general population. The rates increased from 1.8 in 1912, to 4.9 in 1920, to 10.3 in 1930, and to 19.2 in 1940.

There have been attempts to deny or at least to reduce the significance of such data. The first efforts to deny the obvious implications had to do with the change in the average age of the general population, and the relative increase of those aged 60 years and over. It is said that the chance of developing a psychosis with cerebral arteriosclerosis has really been constant, but since the population exposed to such a psychosis has increased there must be a correspondingly greater number of such first admissions. This, however, is a wholly fanciful line of reasoning. It will be shown that far from being constant, there has actually been an increase in the specific age rates of first admissions with psychoses with cerebral arteriosclerosis. If we apply these rates to a constant population used as a standard, we can eliminate the effect of the aging of the general population. We may use the population of New York State, aged 45 years and over on January 1, 1940 as a standard. Dividing this population into intervals of five years and applying the appropriate rates of first admissions with psychoses with cerebral arteriosclerosis, we find that the standardized rates of first admissions with such psychoses were 21.3 per 100,000 population in 1920, 44.4 in 1930, and 66.7 in 1940.[2] From this point of view, therefore, there can be no doubt of the validity of the interpretations of the rising trend in the relative prevalence of such psychoses.

Objections are sometimes raised, however, that for many years psychiatrists did not differentiate clinically between the senile psychoses and psychoses with cerebral arteriosclerosis. The distinction was introduced by Dr. August Hoch only in 1912, and it required time for the psychiatric world to recognize the differentiation. Consequently, it is probable that the low rate of first admissions with psychoses with cerebral arteriosclerosis in 1912 and the rapid increase through 1920 represented, in part only, a shifting of diagnoses from one group to another. This must be admitted, without, however, refuting the evidence of the rising trend since 1920. Through the influence of the teaching facilities of the Psychiatric Institute, the clinical signs of the arteriosclerotic syndrome have been well defined in New York State, and the fluctuations due to different standards of diagnosis have been reduced to relatively small limits. Hence, the fact that arteriosclerotic mental disorders were not well differentiated before 1920 does not invalidate the evidence of the increase of such disorders during subsquent decades. Again we conclude, that the evidence points toward an increase in such mental disorders.

One further objection is raised. It is stated that patients with old-age psychoses are now readily hospitalized, whereas two and three decades ago families were loath to send parents and other elderly relatives to mental hospitals. This is equivalent to saying once more that the chance of developing a mental disorder is constant, but that the chance of being admitted to a hospital has increased. It is difficult to assess the weight of such arguments, which are very largely impressionistic. To argue, as is sometimes done, that rapid urbanization has made it necessary to send such patients out of the home to the hospital is certainly an exaggeration, for in the great metropolitan centers from which most of the patients come, housing conditions have improved, so that it should be easier to care for such patients at home. It is, then, not so much a change in living conditions as in the attitude of the general public toward mental hospitals, that is thought to account for the increase in admissions. It cannot be denied that these hospitals are now viewed more sympathetically than in the past. Such a change in attitude could account in part for increased admissions, but can it explain the very rapid increase during the past 20 years? This

does not seem likely in view of the fact that during the same period admissions of patients with other types of psychoses have been decreasing, though the social pressures for admission to a hospital have frequently been greater than in the case of the aged.

Our first conclusion, therefore, is that first admissions with psychoses with cerebral arteriosclerosis have shown a significant upward trend. However, data of this type tell us only what is the chance of a member of a given population aggregate developing such a mental disorder within a year. It may well be asked, what is the chance that an individual of any specified age will develop a psychosis with cerebral arteriosclerosis before he dies. If the specified age is taken at birth, the resulting probability is called the expectation of such a mental disorder at birth.

The expectation of mental disease depends primarily upon a knowledge of the number who develop a mental disease in a unit of time. In actual practice, we know only a part of this total—namely, those who are admitted to a hospital for the treatment of mental disease, and consequently we should speak of the expectation of first admissions with a mental disorder. It is the writer's experience, however, that the statistics of first admissions in New York State are an excellent approximation to the probable true number of new cases, and he will, therefore, use the expression "expectation of a mental disease" as a shorthand method of describing the chance of being admitted for the first time to a State or licensed institution for the treatment of mental disorders in New York State.

The expectation of a psychosis with cerebral arteriosclerosis depends upon the joint effects of the rates of first admissions with such psychoses and the rates of mortality of the general population. All first admissions to all institutions for mental disease in New York State—public and licensed—are included in the analysis. Contrary to earlier usage, the statistics of the licensed institutions now include all first admissions, both committed and voluntary. For administrative reasons, detailed data with respect to the voluntary admissions to the licensed institutions were not available prior to 1941. However, by utilizing certain data with respect to the ages of such patients on file in the statistical bureau of the Department of Mental Hygiene, it was possible to make reasonable estimates of the age distributions of the entire groups of first ad-

missions to such institutions. First admissions with psychoses with cerebral arteriosclerosis during the fiscal periods 1919-1921, 1929-1931, and 1939-1941 furnish the basis of the present statistical analysis. The admissions were grouped, by sex, in intervals of five years, from which central values were computed in the usual manner. These were converted into true probabilities, and intervening rates of first admissions were found by interpolation.

The mortality data (q_x) for New York State for 1920 were obtained by interpolation from the abridged life tables prepared for the United States Bureau of the Census by Elbertie Foudray.[3] The mortality rates for 1930 were prepared by the statistical bureau of the Metropolitan Life Insurance Company, and were made available through the courtesy of Dr. Louis I. Dublin. The rates of mortality for 1940 were prepared by the statistical bureau of the Department of Mental Hygiene.

The expectations of mental disease were then obtained as follows. Let 1_x represent the population alive and mentally well at exact age x. Multiply 1_x first by the probability of total first admissions at age x, and thus obtain the expected number of first admissions in the xth year. Multiply 1_x again by the probability of first admissions with psychoses with cerebral arteriosclerosis at age x and obtain the expected number of first admissions with such psychoses. Deduct from 1_x the number of first admissions (all psychoses), and multiply the remainder by the mortality rate at age x. Deducting the expected number of deaths, we have a new remainder, 1_{x+1}, which represents the number alive and sane at age (x+1). The process is repeated until we reach that age beyond which we may expect no further first admissions with a psychosis with cerebal arteriosclerosis. Starting at this highest age, we add back cumulatively the total of first admissions with psychoses with cerebral arteriosclerosis at each age. The cumulative total at each age is then divided by the value of 1_x at the corresponding age to give the required expectation at that age. As an illustration of the process, we may consider the following: According to the experience of 1939-1941, there were 77,134 males alive and sane at the age of 50, out of 100,000 at birth. From this total, we derive 121 first admissions, of which 10 were psychoses with cerebral arteriosclerosis.

Deduct 121 from 77,134, and multiply the remainder by the rate of mortality at age 50. This will give the expected deaths among those remaining sane at age 50. Deducting this total, leaves 75,972 alive and mentally well at age 50. This process is repeated to the end of the table. The cumulative total of first admissions with psychoses with cerebral arteriosclerosis at age 50 is 1,896. The latter, divided by the total alive and mentally normal at age 50 (77,134), gives 245.8 per 10,000, which is the expectation of a psychosis with cerebral arteriosclerosis among males at age 50. All other expectations were derived in a similar manner.

The expectation of a mental disease depends in the first place upon the annual rates of first admission (expressed in terms of probabilities). One may, therefore, begin the analysis with a description of these rates, a summary of which is provided in Table 1.

In 1920, the probability of a first admission with a psychosis with cerebral arteriosclerosis showed an increase among males from 0.04 per 100,000 aged 30 to 74.8 at age 67. This was followed by a downward trend to age 85, where the probability was 51.3 per 100,000. It is difficult to attach significance to the trends in the rates at ages beyond 80, owing to the possibility of chance fluctuations among relatively small populations exposed to risk. In 1930, the probability of such a mental disorder was very small and statistically unreliable below age 30. At age 40 the rate was 1.0 per 100,000, and this increased to a maximum of 209.9 at age 82. Beyond that age, the rates declined rapidly. It is evident, however, that at each age, the probability of a first admission with a psychosis with cerebral arteriosclerosis was significantly greater in 1930 than in 1920. The increase was relatively greater at the older ages, especially after age 70. In 1940, the probability of a first admission with a psychosis with cerebral arteriosclerosis showed increases from a minimum of 0.7 at age 40 to 297.1 at age 78. After a decline to 276.3 at age 85, the rate increased to a maximum of 451.4 at age 95. Again, there was a relative increase during the decade at each age, though the rate of increase was less than during the previous decade.

In general, there were similar trends among females, though at a lower level than among males. In 1920, the probability of a psychosis with cerebral arteriosclerosis among females was a minimum of 0.6 at age 40. The curve rose to a maximum of 45.7 at age 77,

TABLE 1. RATES OF FIRST ADMISSIONS WITH PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, 1920, 1930, AND 1940, PER 100,000 OF CORRESPONDING AGE AND SEX

Exact age	Males					Females				
	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)
0	....	....	....	....	....	....	....	....	....	....
5	....	....	....	....	....	....	....	....	....	....
10	....	....	....	....	....	....	....	....	....	....
15	....	....	....	....	....	....	....	....	....	....
20	....	....	....	....	....	....	....	....	....	....
25	....	0.2	....	....	....	....	....	....	....	....
30	*	0.2	....	5.00	....	....	....	....	....	....
35	0.4	*	....	0.10	....	....	0.2	0.4	....	2.00
40	0.7	1.0	0.7	1.43	0.70	0.6	1.7	0.7	2.83	0.41
45	0.9	2.3	1.0	2.56	0.43	2.0	4.2	2.8	2.10	0.67
50	5.7	9.8	13.4	1.72	1.37	4.9	10.3	10.7	2.10	1.04
55	15.6	30.4	39.1	1.94	1.29	15.9	26.6	31.4	1.67	1.18
60	33.2	62.3	84.0	1.88	1.34	27.9	44.9	70.7	1.61	1.57
65	65.2	96.9	150.2	1.49	1.55	31.6	68.5	118.7	2.17	1.73
70	64.4	137.6	201.1	2.14	1.46	32.0	82.4	148.9	2.58	1.81
75	60.9	185.7	269.5	3.04	1.45	42.4	107.6	205.0	2.54	1.91
80	63.3	204.9	288.4	3.24	1.41	35.9	117.9	194.8	3.28	1.65
85	51.3	188.2	276.3	3.67	1.47	26.2	98.2	184.1	3.74	1.87
90	72.2	145.0	317.1	2.01	2.19	35.4	76.9	161.1	2.17	2.09
95	....	....	451.6	....	....	....	....	109.7	....	....

*Less than 0.05.

and then declined. In 1930, the probabilities exceeded those in 1920, being in excess by over 200 per cent at the older ages. The rates grew from a minimum of 0.2 at age 35 to a maximum of 120.1 at age 78. There was a similar curve in 1940, though the rate of increase was less than during the previous decade. The rate rose from a minimum of 0.4 at age 35 to a maximum of 224.0 at age 77.

Except for a few minor exceptions, the male rates exceeded those of the females at all ages (see Table 2). In 1920, the male rates

TABLE 2. RATIO OF RATES OF FIRST ADMISSIONS WITH CEREBRAL ARTERIOSCLEROSIS (PER 100,000 POPULATION) AMONG MALES TO THAT OF FEMALES, NEW YORK STATE, 1920, 1930, AND 1940, AT SPECIFIED AGES

Exact age	1920			1930			1940		
	Males (a)	Females (b)	Ratio of (a) to (b)	Males (a)	Females (b)	Ratio of (a) to (b)	Males (a)	Females (b)	Ratio of (a) to (b)
0	....	....	....	....	....	....	....	....	....
5	....	....	....	....	....	....	....	....	....
10	....	....	....	....	....	....	....	....	....
15	....	....	....	....	....	....	....	....	....
20	....	....	....	....	....	....	....	....	....
25	....	....	....	0.2	....	....	....	....	....
30	*	....	....	0.2	....	....	....	....	....
35	0.4	....	....	*	0.2	5.00	....	0.4	....
40	0.7	0.6	1.17	1.0	1.7	0.59	0.7	0.7	1.00
45	0.9	2.0	0.45	2.3	4.2	0.54	1.0	2.8	0.36
50	5.7	4.9	1.16	9.8	10.3	0.95	13.4	10.7	1.25
55	15.6	15.9	0.98	30.4	26.6	1.14	39.1	31.4	1.24
60	33.2	27.9	1.19	62.3	44.9	1.39	84.0	70.7	1.19
65	65.2	31.6	2.06	96.9	68.5	1.41	150.2	118.7	1.27
70	64.4	32.0	2.01	137.6	82.4	1.67	201.1	148.9	1.35
75	60.9	42.4	1.44	185.7	107.6	1.73	269.5	205.0	1.31
80	63.3	35.9	1.76	204.9	117.9	1.74	288.4	194.8	1.48
85	51.3	26.2	1.96	188.2	98.2	1.92	276.3	184.1	1.50
90	72.2	35.4	2.04	145.0	76.9	1.89	317.1	161.1	1.97
95	....	....	....	....	....	....	451.6	109.7	4.12

*Less than 0.05.

were in excess in fluctuating amounts, but in 1930 and 1940 there were distinct increases in the curve of excess with advancing age. The male excess was especially evident in 1930.

Despite the chances of random fluctuations at the higher ages, it is, nevertheless, noteworthy that only among males in 1940 was

there an increase in the probability of first admissions with psychoses with cerebral arteriosclerosis after ages 75 or 80. This apparent uniformity lends support to the probability that the rate actually does decrease after these ages. We may, therefore, speculate as to the reason for such a trend. The latter differs from that shown in connction with the senile psychoses, where the rate advances steadily with age. Assuming that the diagnostic criteria have not changed among those aged 75 or over, then it is possible that selective influences are at work in extreme old age. It may be taken for granted that those manifesting severe arteriosclerotic changes in later life died in relatively large proportions before reaching the age of 80. Those surviving this age must have been selected biologically with respect to the possibilities of hypertension, and thus are exposed only to the usual degenerative processes of senility rather than to specific arterial changes.

From a consideration of annual rates (and probabilities) of first admissions, we may proceed to a description of the expectation of psychoses with cerebral arteriosclerosis. These are summarized in Table 3.

Among males there was an expectation of 51.2 per 10,000 at birth; that is, of 100,000 male births, 512, or 51.2 per 10,000, will be admitted to a hospital with a diagnosis of psychosis with cerebral arteriosclerosis before they die. The expectation increased smoothly and regularly to a maximum of 83.8 at age 58, and decreased rapidly thereafter. As there were no first admissions with such psychoses after age 94, the curve ends at this age with an expectation of 16.1 per 10,000. The general picture of the corresponding expectations was the same in 1930 and 1940 as in 1920, with a rise to a maximum at or close to age 60, and a decline thereafter. However, the expectations in 1930 exceeded those of 1920 by percentages varying from 100 to 200. In 1930, the expectation at birth was 113.9 per 10,000, which exceeded that of 1920 by 122 per cent. The maximum expectation was 173.0, which was reached at age 58. Between birth and age 45, the expectations of 1930 exceeded those of 1920 in a decreasing ratio. At the age of 45, the excess was 100 per cent. At later ages, the excess grew steadily, reaching 205 per cent at age 80. The expectation at birth was 191.6 in 1940, an increase of 68 per cent since 1930, and an increase of 274

TABLE 3. EXPECTATION OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, BY SEX, PER 10,000 AT EACH AGE, 1920, 1930, AND 1940

Exact age	Males					Females				
	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)
0	51.2	113.9	191.6	2.22	1.68	37.4	95.4	186.3	2.55	1.95
5	58.8	124.4	202.4	2.12	1.63	42.0	102.4	194.4	2.44	1.90
10	59.7	125.8	203.7	2.10	1.62	42.5	103.4	195.5	2.43	1.89
15	60.4	127.0	204.8	2.10	1.61	43.0	104.1	196.3	2.42	1.89
20	61.9	128.9	206.9	2.08	1.61	43.8	105.4	197.7	2.41	1.88
25	63.9	131.8	210.0	2.06	1.59	45.1	107.4	200.0	2.38	1.86
30	66.3	135.1	213.6	2.04	1.58	46.9	109.8	203.0	2.34	1.84
35	69.1	139.2	218.3	2.01	1.57	48.7	112.6	206.6	2.31	1.83
40	72.2	144.7	224.6	2.00	1.55	50.7	115.7	210.9	2.28	1.82
45	76.0	151.8	233.4	2.00	1.54	52.6	118.9	216.6	2.26	1.82
50	80.3	161.1	245.8	2.01	1.53	54.2	122.3	223.2	2.26	1.83
55	83.2	169.9	256.6	2.04	1.51	54.4	123.7	228.2	2.27	1.84
60	83.2	172.6	262.9	2.07	1.52	49.7	119.8	226.1	2.41	1.89
65	75.3	168.6	256.6	2.24	1.52	41.6	111.5	210.5	2.68	1.89
70	56.3	157.3	234.3	2.79	1.49	34.8	97.0	184.7	2.79	1.90
75	44.9	135.2	206.0	3.01	1.52	28.6	82.6	154.2	2.89	1.87
80	33.9	103.5	160.5	3.05	1.55	18.0	59.9	105.6	3.33	1.76
85	26.7	68.8	129.7	2.58	1.89	13.7	37.9	77.8	2.77	2.05
90	28.6	40.1	125.0	1.40	3.12	12.6	21.7	50.1	1.72	2.31
95	....	....	129.3	....	....	....	....	28.4	....	....

per cent since 1920. A maximum expectation of 262.9 per 10,000 was reached at age 60 in 1940. The expectations during 1940 were in excess of those in the preceding decades at every age. The ratio of the expectations decreased, however, to age 55, and increased thereafter.

The general distribution of the expectation of psychoses with cerebral arteriosclerosis was of the same shape among females as among males. There was a rise from birth to maxima in the sixth decade, and a decline thereafter. In 1920, the expectations increased from 37.4 per 10,000 at birth to 54.8 at age 53. In 1930, they increased from 95.4 at birth to a maximum of 123.8 at age 54. The expectation at birth increased by 155 per cent. There was a further increase in 1940, when the expectation at birth reached 186.3, an increase of 95 per cent over 1930, and an increase of almost 400 per cent since 1920. Thus, though females had lower expectations than males, there was a much more rapid increase among the former. This is shown clearly in Table 4. In 1920, the

TABLE 4. RATIO OF EXPECTATIONS OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS AMONG MALES TO THAT OF FEMALES, NEW YORK STATE, 1920, 1930, AND 1940, AT SPECIFIED AGES

Exact age	1920			1930			1940		
	Males (a)	Females (b)	Ratio of (a) to (b)	Males (a)	Females (b)	Ratio of (a) to (b)	Males (a)	Females (b)	Ratio of (a) to (b)
0	51.2	37.4	1.37	113.9	95.4	1.19	191.6	186.3	1.03
5	58.8	42.0	1.40	124.4	102.4	1.21	202.4	194.4	1.04
10	59.7	42.5	1.40	125.8	103.4	1.22	203.7	195.5	1.04
15	60.4	43.0	1.40	127.0	104.1	1.22	204.8	196.3	1.04
20	61.9	43.8	1.41	128.9	105.4	1.22	206.9	197.7	1.04
25	63.9	45.1	1.42	131.8	107.4	1.23	210.0	200.0	1.05
30	66.3	46.9	1.41	135.1	109.8	1.23	213.6	203.0	1.05
35	69.1	48.7	1.42	139.2	122.6	1.24	218.3	206.6	1.06
40	72.2	50.7	1.42	144.7	115.7	1.25	224.6	210.9	1.06
45	76.0	52.6	1.44	151.8	118.9	1.28	233.4	216.6	1.08
50	80.3	54.2	1.48	161.1	122.3	1.32	245.8	223.2	1.10
55	83.2	54.4	1.53	169.9	123.7	1.37	256.6	228.2	1.12
60	83.2	49.7	1.67	172.6	119.8	1.44	262.9	226.1	1.16
65	75.3	41.6	1.81	168.6	111.5	1.51	256.6	210.5	1.22
70	56.3	34.8	1.62	157.3	97.0	1.62	234.3	184.7	1.27
75	44.9	28.6	1.57	135.2	82.6	1.64	206.0	154.2	1.34
80	33.9	18.0	1.88	103.5	59.9	1.73	160.5	105.6	1.52
85	26.7	13.7	1.94	68.8	27.9	1.82	129.7	77.8	1.67
90	28.6	12.6	2.27	40.1	21.7	1.84	125.0	50.1	2.50
95	....	....	....	....	....	....	129.3	28.4	4.55

male expectation at birth exceeded that of females by 37 per cent. In 1930, the excess fell to 19 per cent, and, in 1940, it amounted to only 3 per cent. In each year, the ratio of the male rate to that of the female increased with age, but at almost every age the ratio was less in 1930 than in 1920, and less in 1940 than in 1930.

The preceding data may be summarized as follows: The expectation of a psychosis with cerebral arteriosclerosis increased at birth among males from 51.2 per 10,000 in 1920 to 113.9 in 1930, and to 191.6 in 1940. The expectation increased by 122 per cent between 1920 and 1930, and by 68 per cent between 1930 and 1940. These are noteworthy increases, compared with the growth in the expectation at birth of all psychoses combined. Thus, the general expectation at birth increased among males by only 33 per cent between 1920 and 1930, and by 26 per cent between 1930 and 1940.[4]

Among females the expectation at birth of a psychosis with cerebral arteriosclerosis increased from 37.4 in 1920, to 95.0 in 1930, to 186.3 in 1940. The rate of increase was 155 per cent between 1920 and 1930, and 95 per cent between 1930 and 1940. The general expectation at birth of all psychoses increased among females by only 16 per cent from 1920 to 1930, and by 47 per cent between 1930 and 1940.[4]

There is a further significant contrast. The expectation of all mental disorders increased rapidly to maxima at ages ranging from 10 to 15. There was a slight decline between 1920 and 1940 in the age with the maximum expectation. The age of maximum expectation of a psychosis with cerebral arteriosclerosis was considerably higher. Among males, this age increased from 58 in 1920 to 60 in 1940. Among females, the age with the maximum expectation increased from 53 in 1920 to 56 in 1940.

The expectation of a mental disease depends not only upon the rates of first admissions, but also upon rates of mortality. If the latter decrease, then the expectation of mental disease will increase, even though the rates of first admission remain constant. There has been a gratifying decrease in general mortality since 1920, especially during the decade 1930-1940. It is of interest therefore to inquire what would have been the expectation of a psychosis with cerebral arteriosclerosis had there been no changes in rates of mor-

TABLE 5. STANDARDIZED* EXPECTATIONS OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, BY SEX, AT SPECIFIED AGES, 1920, 1930, 1940

Exact age	Males					Females				
	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)	1920 (a)	1930 (b)	1940 (c)	Ratio of (b) to (a)	Ratio of (c) to (b)
0	51.2	107.1	152.1	2.09	1.42	33.2	73.1	117.7	2.20	1.61
5	58.8	123.0	174.6	2.09	1.42	38.1	83.9	135.1	2.20	1.61
10	59.7	125.1	177.6	2.10	1.42	38.7	85.3	137.4	2.20	1.61
15	60.4	126.7	179.9	2.10	1.42	39.2	86.4	139.2	2.20	1.61
20	61.9	129.6	184.0	2.09	1.42	40.1	88.3	142.3	2.20	1.61
25	63.9	133.7	190.0	2.09	1.42	41.3	91.0	146.7	2.20	1.61
30	66.3	138.7	197.2	2.09	1.42	42.8	94.3	152.2	2.20	1.61
35	69.1	144.7	205.9	2.09	1.42	44.7	98.3	158.8	2.20	1.62
40	72.2	151.9	216.2	2.10	1.42	46.8	102.9	166.4	2.20	1.62
45	76.0	160.0	228.6	2.11	1.43	49.0	107.4	175.5	2.19	1.63
50	80.3	169.5	243.3	2.11	1.44	50.9	112.0	185.6	2.20	1.66
55	83.2	177.5	255.4	2.13	1.44	51.6	114.7	194.8	2.22	1.70
60	83.2	180.1	262.7	2.16	1.46	47.4	112.3	197.6	2.37	1.76
65	75.3	174.1	255.9	2.31	1.47	40.1	105.2	187.8	2.60	1.79
70	56.3	161.6	233.1	2.87	1.44	33.4	92.2	167.0	2.76	1.81
75	44.9	138.8	204.0	3.09	1.47	27.3	79.4	142.3	2.91	1.79
80	33.9	106.0	158.4	3.13	1.49	16.9	57.7	98.7	3.41	1.71
85	26.7	71.1	130.2	2.66	1.83	12.9	37.4	75.6	2.90	2.02
90	28.6	40.9	119.9	1.43	2.93	11.4	22.2	46.1	1.94	2.08
95	....	....	116.0	....	....	....	....	23.5	....	....

*Standardized according to the rates of mortality (q_x) among males in New York State in 1920.

TABLE 6. EXPECTATION OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, 1920

	Number developing a psychosis with cerebral arteriosclerosis during remainder of life of 10,000 alive and sane at beginning of age interval				
Exact age	Males	Females	Exact age	Males	Females
0.....	51.2	37.4	48.....	78.7	53.6
1.....	56.4	40.4	49.....	79.5	53.9
2.....	57.5	41.1	50.....	80.3	54.2
3.....	58.1	41.5	51.....	81.0	54.4
4.....	58.4	41.8	52.....	81.7	54.7
5.....	58.8	42.0	53.....	82.3	54.8
6.....	59.0	42.1	54.....	82.7	54.7
7.....	59.2	42.2	55.....	83.2	54.4
8.....	59.4	42.4	56.....	83.4	53.9
9.....	59.6	42.4	57.....	83.7	53.1
10.....	59.7	42.5	58.....	83.8	52.1
11.....	59.9	42.6	59.....	83.6	51.0
12.....	60.0	42.7	60.....	83.2	49.7
13.....	60.2	42.8	61.....	82.4	48.2
14.....	60.3	42.9	62.....	81.4	46.6
15.....	60.4	43.0	63.....	79.9	44.9
16.....	60.7	43.1	64.....	77.9	43.3
17.....	60.9	43.3	65.....	75.3	41.6
18.....	61.2	43.4	66.....	72.0	40.1
19.....	61.5	43.6	67.....	68.1	38.7
20.....	61.9	43.8	68.....	63.9	37.3
21.....	62.2	44.1	69.....	59.9	36.0
22.....	62.6	44.3	70.....	56.3	34.8
23.....	63.0	44.6	71.....	53.3	33.6
24.....	63.4	44.8	72.....	50.9	32.5
25.....	63.9	45.1	73.....	48.8	31.4
26.....	64.3	45.4	74.....	46.9	30.2
27.....	64.8	45.8	75.....	44.9	28.6
28.....	65.3	46.2	76.....	42.8	26.7
29.....	65.8	46.5	77.....	40.5	24.5
30.....	66.3	46.9	78.....	38.2	22.2
31.....	66.8	47.2	79.....	36.0	20.0
32.....	67.4	47.6	80.....	33.9	18.0
33.....	68.0	48.0	81.....	31.9	16.5
34.....	68.5	48.4	82.....	30.2	15.4
35.....	69.1	48.7	83.....	28.7	14.6
36.....	69.7	49.1	84.....	27.4	14.1
37.....	70.3	49.4	85.....	26.7	13.7
38.....	70.9	49.9	86.....	26.6	13.4
39.....	71.5	50.3	87.....	26.9	13.3
40.....	72.2	50.7	88.....	27.4	13.1
41.....	72.9	51.1	89.....	28.1	12.9
42.....	73.6	51.4	90.....	28.6	12.6
43.....	74.4	51.8	91.....	28.8	11.9
44.....	75.2	52.2	92.....	27.8	10.8
45.....	76.0	52.6	93.....	24.2	8.8
46.....	76.9	52.9	94.....	16.1	5.4
47.....	77.8	53.3			

TABLE 7. EXPECTATION OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, 1930

	Number developing a psychosis with cerebral arteriosclerosis during remainder of life of 10,000 alive and sane at beginning of age interval				
Exact age	Males	Females	Exact age	Males	Females
0.....	113.9	95.4	48.....	157.3	121.0
1.....	121.9	100.7	49.....	159.2	121.6
2.....	123.0	101.4	50.....	161.1	122.3
3.....	123.6	101.9	51.....	163.1	122.8
4.....	124.0	102.2	52.....	165.0	123.3
5.....	124.4	102.4	53.....	166.8	123.7
6.....	124.8	102.7	54.....	168.4	123.8
7.....	125.1	102.9	55.....	169.9	123.7
8.....	125.4	103.1	56.....	171.2	123.4
9.....	125.6	103.3	57.....	172.2	122.7
10.....	125.8	103.4	58.....	173.0	121.9
11.....	126.0	103.5	59.....	172.4	120.9
12.....	126.2	103.7	60.....	172.6	119.8
13.....	126.4	103.8	61.....	172.4	118.5
14.....	126.7	103.9	62.....	171.9	117.1
15.....	127.0	104.1	63.....	171.0	115.6
16.....	127.3	104.3	64.....	169.9	113.7
17.....	127.6	104.5	65.....	168.6	111.5
18.....	128.0	104.8	66.....	167.0	109.0
19.....	128.4	105.1	67.....	165.1	106.1
20.....	128.9	105.4	68.....	162.9	103.1
21.....	129.4	105.8	69.....	160.3	100.0
22.....	130.0	106.1	70.....	157.3	97.0
23.....	130.6	106.6	71.....	154.0	94.2
24.....	131.2	107.0	72.....	150.2	91.5
25.....	131.8	107.4	73.....	145.6	88.9
26.....	132.4	107.9	74.....	140.6	86.0
27.....	133.0	108.3	75.....	135.2	82.6
28.....	133.7	108.8	76.....	129.4	78.7
29.....	134.4	109.3	77.....	123.2	74.3
30.....	135.1	109.8	78.....	116.7	69.6
31.....	135.9	110.3	79.....	110.1	64.7
32.....	136.6	110.8	80.....	103.5	59.9
33.....	137.4	111.4	81.....	97.0	55.1
34.....	138.3	112.0	82.....	90.2	50.5
35.....	139.2	112.6	83.....	82.9	46.1
36.....	140.2	113.1	84.....	75.7	41.8
37.....	141.2	113.8	85.....	68.8	37.9
38.....	142.4	114.4	86.....	62.3	34.2
39.....	143.5	115.0	87.....	56.4	30.9
40.....	144.7	115.7	88.....	50.7	27.7
41.....	146.0	116.3	89.....	45.3	24.7
42.....	147.3	116.9	90.....	40.1	21.7
43.....	148.7	117.6	91.....	34.9	18.7
44.....	150.2	118.2	92.....	29.4	19.6
45.....	151.8	118.9	93.....	22.7	13.1
46.....	153.5	119.6	94.....	13.6	7.8
47.....	155.4	120.3			

TABLE 8. EXPECTATION OF PSYCHOSES WITH CEREBRAL ARTERIOSCLEROSIS IN NEW YORK STATE, 1940

	Number developing a psychosis with cerebral arteriosclerosis during remainder of life of 10,000 alive and sane at beginning of age interval				
Exact age	Males	Females	Exact age	Males	Females
0.....	191.6	186.3	51.....	248.2	224.4
1.....	199.6	192.4	52.....	250.4	225.6
2.....	200.8	193.3	53.....	252.6	226.7
3.....	201.5	193.8	54.....	254.6	227.6
4.....	202.0	194.2	55.....	256.6	228.2
5.....	202.4	194.4	56.....	258.4	228.6
6.....	202.7	194.7	57.....	260.0	228.6
7.....	203.0	195.0	58.....	261.4	228.3
8.....	203.3	195.2	59.....	262.4	227.4
9.....	203.5	195.4	60.....	262.9	226.1
10.....	203.7	195.5	61.....	262.9	224.1
11.....	203.9	195.7	62.....	262.3	221.5
12.....	204.1	195.8	63.....	261.1	218.4
13.....	204.3	196.0	64.....	259.2	214.8
14.....	204.5	196.1	65.....	256.6	210.5
15.....	204.8	196.3	66.....	253.2	205.7
16.....	205.1	196.5	67.....	249.0	223.8
17.....	205.5	196.8	68.....	244.4	196.1
18.....	205.9	197.0	69.....	239.4	190.4
19.....	206.4	197.3	70.....	234.3	184.7
20.....	206.9	197.7	71.....	229.3	179.2
21.....	207.4	198.1	72.....	224.2	173.7
22.....	208.1	198.5	73.....	218.8	168.0
23.....	208.7	199.0	74.....	212.9	161.7
24.....	209.4	199.4	75.....	206.0	154.2
25.....	210.0	200.0	76.....	197.9	145.3
26.....	210.7	200.6	77.....	188.8	135.4
27.....	211.4	201.1	78.....	179.1	124.8
28.....	212.1	201.7	79.....	169.5	114.6
29.....	212.9	202.4	80.....	160.5	105.6
30.....	213.6	203.0	81.....	152.4	98.1
31.....	214.4	203.7	82.....	145.4	92.1
32.....	215.4	204.4	83.....	139.2	87.2
33.....	216.3	205.1	84.....	133.9	82.6
34.....	217.3	205.8	85.....	129.7	77.8
35.....	218.3	206.6	86.....	126.8	72.4
36.....	219.4	207.4	87.....	125.1	66.4
37.....	220.6	208.2	88.....	124.3	61.9
38.....	221.8	209.1	89.....	124.3	55.8
39.....	223.2	210.0	90.....	125.0	50.1
40.....	224.6	210.9	91.....	126.4	44.9
41.....	226.1	211.9	92.....	127.9	40.3
42.....	227.7	213.0	93.....	128.9	36.0
43.....	229.4	214.2	94.....	129.4	32.0
44.....	231.3	215.4	95.....	129.3	28.4
45.....	233.4	216.6	96.....	126.9	25.0
46.....	235.7	217.9	97.....	119.9	21.3
47.....	238.2	219.2	98.....	102.5	16.8
48.....	240.7	220.5	99.....	67.7	10.2
49.....	243.3	221.9			
50.....	245.8	223.2			

tality. Let us assume specifically that males and females both had the rates of mortality prevalent among males in New York State in 1920, and the rates of first admissions with psychoses with cerebral arteriosclerosis as shown above in 1920, 1930 and 1940. The results are summarized in Table 5.

Under similar conditions of mortality, the expectation at birth of a psychosis with cerebral arteriosclerosis among males would have increased from 51.2 per 10,000 in 1920 to 107.1 in 1930, to 152.1 in 1940. This represents an increase of 109 per cent between 1920 and 1930, compared with an increase of 122 per cent on the basis of the actual mortality. Between 1930 and 1940 the increase would have been 42 per cent, instead of 68 per cent. Among females, the expectations at birth, based upon constant mortality, would have been 33.2 in 1920, 73.1 in 1930, and 117.7 in 1940. These represent increases of 120 per cent between 1920 and 1930, and 61 per cent between 1930 and 1940. Corresponding increases, based upon the actual rates of mortality, were 155 and 95 per cent, respectively. Part of the increase in the expectation of a psychosis with cerebral arteriosclerosis was, therefore, clearly due to decreased rates of mortality. The effect of the decreasing trend in mortality rates is also seen clearly in the sex comparisons. On the basis of the actual rates of mortality and of first admissions, the expectation at birth of a psychosis with cerebral arteriosclerosis among males exceeded that of the females by 37 per cent in 1920, 19 per cent in 1930, and 3 per cent in 1940. Based upon the higher mortality of 1920, the corresponding excesses would have been 64, 47 and 29 per cent, respectively.

Will the expectation of a psychosis with cerebral arteriosclerosis at birth (or elsewhere during the life span) increase in the immediate future? This depends upon the trends in the rates of first admissions with such psychoses and in the general mortality rates. It is highly probable that the rates of first admissions will increase at least for another decade. It is equally probable, that, barring unforseen epidemics, mortality rates will continue downward, probably with a lower rate of decline. Consequently, we must look for-

ward to a further increase in the expectation of a psychosis with cerebral arteriosclerosis, as a result of the combined effect of an upward trend in rates of first admissions, and a decrease in rates of mortality in the general population.

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CAPGRAS' SYNDROME, A PECULIAR ILLUSIONARY PHENOMENON, CONSIDERED WITH SPECIAL REFERENCE TO THE RORSCHACH FINDINGS

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In 1923, Capgras described a type of chronic paranoid psychosis, which is characterized by a very peculiar symptom. The patient fails to recognize the identity of a familiar person, and, instead, believes him to be a "double." This "double" resembles the familiar person as would an identical twin.

Following the first description (Capgras and Reboul-Lachaux, 1923), the disturbance was termed "Capgras' syndrome" in the French literature, a term which was subsequently adopted by British authors (Coleman, 1933; Murray, 1936). At first sight, this syndrome might be considered simply as another psychotic manifestation without any special interest. However, even the first communication showed certain features which exceeded the value of a mere clinical curiosity. A close study of the symptom complex raises questions of a much more general interest, especially problems of a psychological, nosological and genetic nature. It was from this point of view that the following observations were made.

Case 1

M. A. M., an unmarried woman of 42, was admitted to the Verdun Protestant Hospital, Montreal, in January, 1939.

Family History (as given by the father). The patient's father has two sisters and one brother. One of the sisters, a school teacher, is reported to have had a "nervous breakdown." No details of this are known except for the fact that she did not take up her profession again. There is no history of further abnormality on the father's side.

The patient's maternal great-grandmother suffered from "persecution mania." She felt that people wished to injure her, and she was very bitter against her own family. She died at the age of 80 and, as far as anyone knows, was never confined to a mental institution.

The mother's three sisters are well, but the mother herself was always "suspicious." She would see somebody in town who resembled her husband and believing it *was* actually her husband could never be persuaded to the contrary. The informant remembers one example very vividly when she thus mistook his identity. She was looking out into the street through a window, when she saw a very drunken man she took to be her husband walking along. Half an hour later, the husband came home, perfectly sober. She told him what she had seen and he explained to her that it was impossible. First, he had not been walking where she thought she had seen him at all and, second, he could not possibly be sober half an hour after having been so drunk. She found this very strange, was actually perplexed at seeing him completely sober, and had difficulty believing that the man she had seen was not her husband —finally she admitted hesitantly, "It must be a case of double." She had great faith in her dreams; and when she dreamed that her husband was with another woman, she really believed it and paid no attention to his statements to the contrary.

The parents' marriage was obviously never happy. In this connection, it is interesting to know that most of the time, relatives of the mother lived in the house. From the father's account, as well as the patient's, the chief source of conflict was the mother's attachment to her own people. The mother finally decided to move to New York to join her sister. Her husband, who was a Canadian government employee, would have forfeited his old age pension, if he had moved to the United States and he tried therefore, to dissuade her from her plan. This was of no avail; and at the end she went into what her husband calls a "sit-down" strike, refusing to do any housework until he would let her go. This he did finally, after having implored her, even at the railway station, to change her mind, while it was still possible. She then moved to the United States, where he supported her for three years, with the understanding that she could still return if she wanted to. After the three years were over, he did not hear from her any more. At the time of the woman's departure, the patient was 20 years old.

Personal History. M. A. M. was the only child. She was born in Cheshire, England, and went to school up to the age of 16. From all accounts, she was a good scholar, and is said to have received

the Junior Oxford University Certificate. She intended preparing for the L. R. A. M. when she left for Canada at the age of 17, with her parents. She worked for over three years in an advertising agency, and subsequently held various jobs at newspaper offices and with insurance companies. She also had taken up nursing at the age of 19, but after 10 months decided that this was not her appropriate vocation. It was her own decision; the hospital authorities were satisfied with her. Similar situations arose when she held other positions. She would gradually become convinced that people did not want her, and then leave. In fact, this was the first thing that struck her father as being peculiar. She traveled from Montreal to Ottawa to tell her father that her employers (a big insurance company) were dissatisfied with her and had tried to "freeze her out." She left the position under this impression, but later her father found out from the firm that she had an excellent record.

At one time (the father was not sure exactly when), she wrote her father a letter from New York, telling him that she had met a man, who wanted to live with her without being married. Her father was strictly against this proposal, and it seems to have "fallen through."

At about the age of 35, M. A. M. began to complain of numerous ailments, and to make many purchases, which seemed to the father unnecessary and ridiculous, for instance shoes of a most expensive kind.

When her father returned from a trip to England in 1938, she met him at the boat. She told him immediately that he was not her father, that her real father had been killed, whereas, he was an imposter, who resembled her father to an astonishing degree. From that time, she gradually became a social nuisance. She frequently went to the police or to detectives, to find out about her father who had been killed in England, and about that imposter at home, who looked and behaved so surprisingly like her father. She also developed ideas about people having stolen things from her.

Her father, in relating her story, remembered two different accounts she used to give, as to how he had met his death. One of them was that she had seen her father walk up a flight of stairs, with another man following. This man killed her father with a

gun. He was a friend, resembling her father closely, and he is the swindler who came to visit her later pretending to be her father.

The second version was that her father was walking up the gangplank of a ship and that a man walking behind him pushed him over the edge and into the water. She says she is very fond of her father, and she kept on telling the "imposter" how much she loved her real father. At the same time, she hated the "imposter." Occasionally her grasp of his identity seemed to change within hours. For instance, once he was lying on the couch while she was lying on a bed. On waking up from her nap, she saw her father lying on the couch; and she took him for a complete stranger. The father—unable to cope with her any longer—finally had to have her committed to the Verdun Protestant Hospital in Montreal.

On Admission to the Hospital (January, 1939). The physical examination of the patient showed nothing noteworthy, except for an old laparotomy scar. She looked as if she were the age stated, 42, and was apparently healthy; the routine laboratory findings were entirely negative. In her general behavior and attitude, she was friendly, pleasant and cooperative.

M. A. M.'s history, as given by herself, agreed in its general outlines with the one given by her father. She added that in 1920, she had a laparotomy for "something on the bowels," parts of which were resected.

For her numerous changes of employment she gave reasons different from those she had originally given to her father. These reasons sounded quite plausible; thus, once she had to give up a position because her father moved to another town. Another time, she had to give up the position of superintendent of a convalescent home for children because the place was put under quarantine and closed.

A few years before her admission, she said, she had gone to see a doctor because of a twisted ankle. She stated that she passed through the most astonishing experience in the doctor's office. When she got there, she said, she was made to strip and lie on the sofa in the presence of a nurse; and three different doctors came in and started poking at her back and at her legs and arms, a thing which she thought was extremely strange, since she was only complaining of a strained ankle. They took a specimen of blood from

her arm and made her lie down for one or two hours. She also received an injection; and when she was allowed to go out, she went to a restaurant but suddenly felt as if she were intoxicated. In fact, she told the waitress, "You think I am intoxicated, but I am not." She said that she was feeling giddy and that she went home and slept soundly throughout the night. The following day she felt quite upset and her abdomen had a "funny sensation," where the doctor had been poking into it; she also limped. Shortly after this, she declared, she fainted; and, after she had returned to consciousness, she went to see another doctor, who stated that she suffered from angina pectoris.

About that time, she asserted, she had received some newspapers from England, in which there was the death notice of a certain A. M. (her father's name), giving her father's exact age. She also received a similar notice from Scotland. When asked whether she could produce these newspapers, she stated that unfortunately she could not, because they had been thrown away by her landlady. She was firmly convinced that her father was not her father, and that the person who was making the monthly payments to her, was a different man altogether.

Auditory or visual hallucinations could not be demonstrated either in her spontaneous productions or on questioning. Her conscious productions were perfectly lucid. In her narrative, she showed a natural flow of speech. There were no signs of blocking, retardation or flight of ideas. She was well oriented in the three fields. Retention and memory were good, except for certain obvious distortions of memory as just indicated. Her vocabulary was good and that of a fairly well educated person. She showed no insight at all into the morbid character of some of her productions and experiences. She kept on wondering why she ever had been brought to a mental hospital.

On the other hand, her emotional reaction to the situation was entirely inadequate. Everything from unimportant details to the tragic history of her father's supposed death and the imposter's crimes, was related with a bland expression and in a tone of voice reminiscent of a polite drawing-room conversation.

Further Course in Hospital. The patient adapted herself well to hospital routine. She spent her time reading and playing the piano,

and with needle-work at the occupational therapy class. For some time, she also worked as a secretary in the kitchen office. She was always pleasant to speak to, but could see no particular reason for being in the hospital. Nevertheless, she was never angry or depressed about this as one might expect a normal person to be. The following facts are noteworthy. During the first year, she had numerous physical complaints for which there was no objective basis. Her heart "was not right." A "definite curve" in her back "pushed her stomach forward." Her rectum was "closed." There was a peculiar feeling round her pubic bone especially on passing water. This feeling is present today, although nothing was ever found which could explain it.

During the following years, somebody began to interfere with her body during the night. People were applying acid enemas to her rectum and unpleasant chemical douches to her vagina. All this happened during sleep, and she usually awakened with these unpleasant feelings. She suspected the nurses and the other patients, either in general or referring vaguely to some particular ones. Reasoning was of no avail. She never accused these people in an abusive way, or began quarreling, and her bland emotional attitude remained the same. It could never be ascertained whether she had true sensory hallucinations or whether she merely misinterpreted some real, unpleasant sensations.

Her father visited her faithfully every week, but for the first two years, she hardly ever acknowledged his identity. When he brought her practical gifts, such as shoes, she soon discarded them because, she felt, that they were purposely devised by the "imposter" either to entice her or to do her harm. In fact, her father was apparently the only person who ever evoked emotional outbursts from her; for at times she became very insulting. Following a visit she would write him a letter calling him a "cad" and accusing him of the murder of her father. During this time, she gave a third version as to how her father had met his death—which was, that she visited him when he was wounded in a base hospital during the last war. Circumstances were suspicious. He gave her a dramatic final farewell and somebody else substituted for him.

A Rorschach test given in January, 1942, gave findings shown in Table 1 and Figure 1.

FIG. 1.

TABLE 1. RORSCHACH TEST. M. McK. JANUARY 21, 1941

2.06 P. M.

I.	7″		Back with ribs of an insect, beetle	W	F	AAt.	
		V	Chalice or urn	D	F	obj.	
			Figure of woman, without head, clothes on (shape)	D	F	H	
			Bat (stuffed)	D	F	A	P
		>	Ice cliffs, iceberg (shape)	D	F	nat.	
			Old man, hewn of stone	D	F	H	
			Cameos of woman's head	d	F	Hd	
			Two figures of man watching from observation points	dd	M	H	O
		>	Husky dog	di	FM	A	
		>	Polar bear	D	FM	A	
			Woman in stone	d	F	H	
			Wolf	di	FM—	A	O
		>	Portion of water, two boats coming out on surface	DS	F, FK	nat.	
			Monkey	di	F—	A	O
			Back, head and shoulder of a man, with a belt around his waist	D	M	H	
			Two children, one boy and one girl	di	M—	H	O
			Profile of two men	d	F	Hd	
			Another animal	di	F—	A	O
			Two baby wolves	di	F—	A	O
		V	Crown worn by royal head	W	F	obj.	
			Two mittened hands	d	F	Hd	
		V	Two cows, as you see them in the butcher shop	D	F	A	
II.	4″		Two Aberdeen terriers (very much alive)	W	FM	A	P
	30″		A man with goggles, pointed hat, looking through telescope	d	M	H	
			Lamp shade, chandelier	DS	F→FC′	obj.	
			Red ink blotches	D	C	ink	
			Long narrow pathway leading to a temple	di	FK	nat., arch	
			Emblem of a university	W	F	emblem	
		V	Profile of Father Time	d	F	(Hd)	
		V	Old sailor like Sir Frances Drake	d	F	H	O
		>	Buffalo	D	FM	A	
			Top of the cross on Mt. Royal	d	F→FK	obj.	
			Man with a black mustache	di	F—	Hd	O
			The man with a cap on	di	F—	Hd	O
			Someone like Churchill	di	F—	H	O

TABLE 1—(Continued)

		Butterfly (museum)	D	F	A	P
		Top hat broken in two	D	F—	obj.	O
		Two men watching behind a cliff, a woman kneeling down, also two more people on the other cliff	dd	M, FK	H	O
		Child about six years old (picture)	di	F—	Hd	O
III.	45″	Two geese (''alive'')	D	FM	A	
		Two arms and hands of a woman	D	F	Hd	
	V	Heads of two Zulus	D	F→M	Hd	
		Portion of water, with moonlight on it	D	FK, C′	nat.	
		Locks of steamships, with clouds in the sky	d	FK, K, m	nat.	
		Fallen boughs of tree	D	F	pl.	
		X-ray of kidney, other abdominal organs	D	F—	At.	
		Pole sticking out of a pond, ripples	D	FK, m	nat.	
		Two small seals on rocks	dd	FM, FK	A	
		Memorial stone, tablet	d	F	obj.	
		Parts of smashed-up airplane, there is also blood	W	F, C	smash-up	
IV.	6″	Spinal colmun	D	F	At.	
		Japanese emblem	W	F	emblem	
		Headgear of Chinese emperor	W	F	obj.	
		Face of cow or bull	D	F	Ad	
		Woman kneeling at graveside	dr	M, FK	H	O
		Entrance to cave	DS	FK	nat.	
		Shoe or slipper	d	F	obj.	
		Totem pole	D	F	obj.	
		Lion cub's head	di	F—	Ad	O
		Figure of young girl, with the small face of a man of 70 around her shoulder	di	M—	H	O
	V	Irish harp	D	F	obj.	
	V	Child of about six years, on the other side a man, both looking at the same thing	di	M—	H	O
V.	20″	Donkey standing on hind legs	D	FM	A	
		Pair of tweezers	D	F	obj.	
		Outline of a man	di	M—	H	O
		Capital letter ''V''	d	F	letter	
VI.	25″	Human back (spine)	D	F	Hd	
		Pedestal (with the color of stone)	di	F, C′	obj.	
		Face (on top) (like skull)	d	F	At	

TABLE 1—(Continued)

	V	Floor lamp	di	F, C′	Obj.	
		Woman's head and bust (shape)	di	F	Hd	
		Front of straight jacket	W	F	obj.	
		Figure of girl (shape)	d	F	Hd	
		Leather (surface)	W	c	Leather	
VII.	33″	Candle	d	F	obj.	
		Caves	D	FK	small caves	
		Man's face	d	F	Hd	
		Another face	dd	F	Hd	
	V	Elephant's face and trunk (dead)	d	F	Ad	
		Stones or rocks (shape)	D	F	stones	
VIII.	8″	Very pretty butterfly (color)	D	FC	A	
		Animals (alive)	D	FM	A	P
		Two flags (color)	D	FC	obj.	
	V	Cleopatra's needle	di	F	sculp.	
		Mountain, with some people on it	D	FK, M	nat.	
		Chandelier (''color'')	D	F/C	obj.	
	V	Old-fashioned stove, Quebec heater (white china)	D	FC′	obj.	
		Emblem of some kind	D	F	emblem	
IX.	62″	Floor lamp (''color'')	D	F/C	obj	
	120″	(I don't think I can do very much with that)				
X.	70″	Two parrots' heads	D	F	Ad	
		Things used in laboratory (gray cylindrical figure on top)	d	F	obj.	
		Crab	D	F	A	P

3.52 P. M.

$R=92$

$T=6360''$

$\frac{T}{R}=61''$

$\frac{A}{b}=18$

$\frac{A}{c}=38$

$\frac{F}{R}\%=65\%$

$\frac{FK+F+Fc}{R}=73\%$

$\frac{A+Ad}{R}=23\%$

$P=5$

$O=18$

$(H+A):(Hd+Ad)=27:18$

sum $C=3.5$

$M:\text{sum } C=9:3.5$

$(FM+m):(Fc+c+C')=9:1$

$\frac{VIII+IX+X}{R}=13\%$

$W:M=10:9$

Half a year later (in July, 1942) M. A. M. received electric convulsive treatment, with eight minor and nine major seizures. During the first few months following this therapy, she was rather dull and unproductive with some impairment of memory. At this time, another Rorschach test was given which yielded the results shown in Table 2 and Figure 2.

FIG. 2.

TABLE 2. RORSCHACH TEST. M. McK. NOVEMBER 29, 1942

3:03 P. M.

I.	15″	Woman's figure, hands up, no head ("beheaded")	D	F-M	H	
		Butterfly (dead)	W	F	A	P
	V	Chinese head dress	W	F	cl.	
	>	Bear (quite alive)	D	FM	A	
		Woman's head and neck in cameo	d	F	Hd	
		Birds (seagulls or penguins)	d	FM	A	
	V	Chalice	D	F	obj.	
		Dog's head (in iron)	d	F	Ad	
		X-ray of some part of the body, lower part of spine	W	F	At	
		Man's face	d	F	Hd	
II.	2″	Two dogs (standing like in circus)	W	FM	A	P
		Lamp (white opaque glass)	DS	FC′, Fc	obj.	
	V	Two heads of Father Time	d	F	(Hd)	
		Face of a child	di	F—	Hd	O
		Parrot (or eagle?)	di	FM	A	
		Mostly X-rays (shape)	W	F	At	
III.	30″	Hands of a woman with sleeves on	D	F	Hd	
		Pole sticking out of water (ripples)	d	FK, m	nat.	
	V	Faces of two negroes	d	F→M	Hd	
		Two bird-like animals (dead)	D	F	A	
IV.	8″	Boar or ox, head	D	F	Ad	
		Part of spine	D	F	At	
	V	Two seals (only half the body)	d	F	A	
V.	28″	Wasp (very much alive, wings hidden by this thing)	D	FM	A	
		Forceps or pincers	d	F	obj.	
		Deformed man	di	M—	H	O
VI	12″	Pedestal	D	F	obj.	
		Skull	d	F	At	
	V	Looks like a straight jacket (outline)	W	F	obj.	
		Tuft of grass	d	F	pl.	
VII	25″	Different faces	D	F	Hd	
		Head and eyes of a young teddy bear	D	F	Ad	
	V	Two ballet dancers	W	M	H	
		Chimney (inactive, no smoke)	di	F	obj.	
VIII	33″	Two animals (I think they are tigers, alive)	D	FM	A	P
		Two flags (shape)	D	F	obj.	
		Chandelier	D	F	obj.	
		Chest and throat (in medical book)	D	F	At	
IX.	32″	V Other chandelier	D	F	obj.	
	>	Head of young horse	D	F	Ad	
	>	Head and neck of a man	D	F	H	

TABLE 2—(Continued)

X. 28″	Two parrots, heads and shoulders	D	F	A	
	Two crabs	D	F	A	P
	Dog (alive)	D	FM	A	
	Several little dogs (playful)	D	FM	A	
	Two snakes (alive)	D	FM	A	
	Head and shoulders of a woman with a hat on	de	F→M	Hd	
V	Two small birds on some kind of perch	D	FM	A	

3.32 P. M.

$R=48$

$T=1740''$

$\frac{T}{R}=36\%$

$A_b=15$

$A_c=25$

$\frac{F}{R}\%=71\%$

$\frac{FK+F+Fc}{R}=73\%$

$\frac{A+Ad}{R}=39\%$

$P=4$

$O=2$

$(H+A):(Hd+Ad)=17:11$

sum $C=2:0$

$(FM+m):(Fc+c+C')=10:0$

$\frac{VIII+IX+X}{R}=29\%$

$W:M=7:2$

During this time she also had begun to acknowledge her father's identity. Realization of this, however, did not come to her as an overwhelming experience, accompanied by adequate emotional response. She still believes that there has been an imposter for some time, or at least feels that "all those experiences" were very strange and could not be explained. In other words, she lacks insight into the morbid character of her experiences. Her attitude to her father is that of a superficial, friendly politeness.

She still has bodily hallucinations centering round the pelvis, especially during the night. Not all of this is painful. What "they" do to her pelvic bone is apparently quite comfortable. Sometimes she is awakened by other patients tapping the walls in a peculiar fashion, which cannot mean anything but signs referring to her. "Of course, it may be imaginary, but you must admit it is all very strange."

Referring to her previous experiences about her father's "double," she volunteers the statement that when she visited her mother in New York the last time (before the patient's commitment), she found the mother very much changed. She was still the same per-

son, there was no question of "double" or trickery; but, just the same, there was something very strange about the fact that a person could change so much in such a short time.

Discussion of Case 1

To summarize briefly, this is a woman who, beginning at the age of 19, changed her jobs often, apparently under the influence of ideas of reference. When she was 35, she developed a full-blown psychosis. The most alarming and conspicuous symptom was the "illusion of the double," i. e., she thought her father to be another person posing as her father and closely resembling him. At the same time, she showed very marked emotional poverty, apparent bodily hallucinations, mainly referring to the pelvic organs, and certain illusionary experiences. This is a case of schizophrenia, and one might disregard the "illusion of the double" as something insignificant, especially since there has been a marked tendency in French psychiatry to describe such psychological oddities under the heading of special "syndromes."

In the case of Capgras' syndrome the situation is somewhat different, mainly because the disturbance has so far been observed only in women. This fact in itself is suggestive of a true entity. The only exception is Murray's case (1936); however, after studying this case more closely one gets the impression that this is not the true phenomenon as described by previous authors but an accidental manifestation of the patient's negativism. All other cases seem to have been female patients suffering from schizophrenia.*

The fact that this syndrome occurs only in female patients allows only two possible explanations; either there is something in the psychological makeup of women which predisposes them for this type of disturbance, or we have here a true psychopathological entity which is hereditary in a sex-linked form.

Coleman (1933) attempts the first explanation. His attempt is based on psychoanalytical concepts of differences in psychosexual development of men and women. According to Freud (1932), there is an essential sex difference in the development of the Oedi-

*Since this paper has been in press, the authors' attention has been drawn to a paper by Davidson (PSYCHIAT. QUART., 15:513, 1940) on two cases of Capgras' syndrome in male patients.

pus situation. The little girl changes at the age of four or five her attitude of love for the mother into love for the father and hatred for the mother. Coleman feels that this change, which does not take place in the boy, produces later in women a peculiar predisposition to be insecure in their emotional attachments in general. It creates the trauma of an original deception, a deception which may be reexperienced under psychologically abnormal circumstances.

Regardless of whether this theory is correct, it is remarkable that in nearly all cases of Capgras' syndrome, including the present one, the person who is experienced as a double is not just any person; it is a beloved one who usually—with the change of identity—becomes, at the same time, hated. This fact in itself is quite suggestive of an interpretation along psychoanalytical lines. In the present case, one can speak of a repressed incestuous desire which expresses itself by a well-known mechanism in hatred. The scene for instance, during which the patient lies down in the same room with her father and wakes up from her nap to find the man lying beside her changed into the hated stranger, is full of obvious symbolism. She seems to have a tendency toward such a type of inverted wish-fulfillment all along; compare, for example, the tortures she underwent for a long time, with painful acids injected into the vagina and rectum for a long time almost every night.

In this connection, it is interesting to note that an almost identical situation existed in Capgras' second case (Capgras and Carrette, 1924). This was the case of a schizophrenic woman in whom the incestuous desire had at one time led to an open sexual advance to her father. Later both parents turned into doubles who were hateful persecutors.

The psychoanalytical interpretation would be quite sufficient if one had to deal here with dreams or neurotic symptoms. However, the fact that the patient has profound disturbances in such basic psychological functions as the experience of identity seems to the writers to be far beyond the scope of a merely psychological or psychoanalytical "understanding" (Jaspers, 1923). It must be a matter of deeper biological strata of the personality. This is borne out by several facts. First, if early infantile conflicts in themselves were sufficient to produce such an illusion it would be

observed much more frequently. Second, there is a definite family history. Not only did the patient's great-grandmother suffer from what seems to have been a paranoid psychosis, but the mother herself had a tendency to experience at times a peculiar change of her husband's identity.

What then is the underlying mechanism which makes such a disturbance possible? Here the French school (Halberstadt, 1923; Courbon and Tusques, 1932) and the German school of psychologists came, apparently independently, to the same conclusion. In studying the development of paranoid schizophrenic psychoses closely, they found that one of the basic phenomena in a number of these cases was a peculiar change in experiencing the outside world. The fundamental values of perception, such as color, perspective, etc., are unchanged; but there is a primary change of the experience which cannot be defined any further. This change is not "interpretative" but "intuitive," as Courbon and Tusques pointed out; i. e., it is not due to any preconceived idea of the patient but is immanent in the very act of perception. It is, for instance, not due to delusions of persecution but precedes them and provides the soil for them as it were. This is what Jaspers means by "*Wahnstimmung*" (delusional mood), a peculiar state which was shown to precede the development of delusions. He provides interesting examples of this. One patient, whom the present writers themselves were able to observe, remarked about the beginning of her psychosis: "I was immediately struck by the strange way in which things such as cars and people were moving in the street." According to Jaspers, it is characteristic that the patient cannot describe this weird change any further, and that wherever one has the opportunity to observe closely enough, the development of delusions follows and does not precede this experience. If the schizophrenic process has a somatic basis at all, no doubt these basic amorphous experiences "which cannot be reduced any further" (Jaspers) must be due to it. They are least likely to be part of a psychological superstructure. Brochado (1936) compares these elementary changes of the experience to changes during certain types of "psychic aura" in epilepsy, such as depersonalization, "déjà vu," etc.

The illusion of the double is very closely related to these disturbances. It presents one variety of what Wernicke (1906) de-

scribed as "transitivism" in mental patients. Halberstadt (1923) considered this change, in which elements of the patient's surroundings appear "modified," as a form of phylogenetic regression. Indeed, Levy-Bruhl (1922), in his fundamental investigation on the normal psychology of primitive peoples, describes this sort of perception as one of the features of the primitive mind. ". . . in the conception of the primitive mentality, objects, persons, phenomena can be themselves, and at the same time something else." This is literally what the writers' patients said at times about the "doubles," referring to the very act of experience itself and not merely meaning an emotionally ambivalent attitude.

The Rorschach findings seem to substantiate this analysis. In view of the abnormally high form percentage and the bizarre "minus" responses in conjunction with an otherwise good ability to see forms, the record is quite characteristic of a schizophrenic one. There is a great total number of responses, and a high percentage of small details which, if one disregarded all the other features would remind one of the record obtained in compulsive obsessional states. It is, however, interesting to note that Capgras and Reboul-Lachaux remarked in their first patient on a "meticulous search for minute details" in everyday life.

The most interesting features of the Rorschach, however, are the original (O) responses. Here again, one can clearly distinguish between the psychoanalytical and the phenomenological aspect of the disturbance. First of all, as is frequently seen, most of these O responses betray by their content the patient's complexes—"women kneeling at grave-side," "figure of a young girl with a small face of a man of 70 around her shoulder," "child of about six years, on the other side a man, both looking at the same thing," "Churchill," "a broken top hat," "two men watching behind a cliff a woman kneeling down," "a child about six years old." All these responses (See Table 1) illustrate well what was said above about the psychoanalytical aspect of this case, especially about the father complex. Fourteen of these 18 O responses were "minus," and 13 of these 14 "minus" ones were inside details (di) that is to say, the patient saw the form inside a blot, in an area whose edge nowhere coincides with the edge of the blot. She had on the whole a remarkable tendency to give di responses (22) of them; but she

had an even greater tendency to produce just those responses which had a greater emotional significance, from "inside" the perceived material. This cannot be a mere coincidence and must be important as regards the psychological disturbance as a whole.

Little has been known to the present about the significance of predominating di responses. Klopfer and Kelly (1942) state that these responses are rare and add that they were found in "schizoid" subjects who are "fighting against the disintegrating forces of their unconscious. In selecting these unusual areas they are piercing a blot area which is usually perceived as an unbroken one. This seems to serve the subjects as a magic procedure which deprives these blot areas of the threatening shading qualities." Such an interpretation is already influenced by a hypothetic conception regarding the schizophrenic reaction as a whole.

The present writers felt that the marked tendency to give di responses may in the present case be explained in two different ways. To see something "inside" things where nobody else does, can be a manifestation of the same disturbance which produces morbid distrust, of the "paranoid" attitude in the strict sense. Or it can be associated with those basic morbid phenomena mentioned above which were described as "transitivism." The writers compared the patient's record with 29 other records with paranoid features (schizophrenic ones and others). It was surprising to see that the peculiar tendency to give a large number of minus Original "di" responses was not found in any of those other records.

A remarkable feature of this case is the fact that the patient's mother had similar disturbances as regards the quality of identity though apparently to a minor degree. It is possible that the patient witnessed as a child that the mother mistook the father's identity, and that one is simply confronted with a case of unconscious imitation or "pseudoheredity" in the sense of Freud. The assumption that an odd psychotic symptom should in itself be hereditary, seems fantastic; and yet it is by no means impossible. There is not only the example of rare physical malformations but also of odd isolated metabolic dysfunctions (alkaptonuria, pentosuria) which are genetic entities.

Another interesting point is the change that took place following electric shock treatment. Although there were still numerous illu-

sions, and the patient was emotionally even more impoverished than before, she began to acknowledge her father's identity. It is difficult to believe that the treatment obliterated this symptom specifically. One has only to remember that its presence had been fluctuating at times before treatment, that she had no insight into the morbid character of this symptom at any time, and that she began to acknowledge her father's identity without the least emotional warmth which would normally accompany such a recognition. Moreover, she was seen by one of the writers since the foregoing observation was recorded, and she remarked that there was still some mysterious element as to her father's (and even her mother's) identity.

Case 2

H. W. C., a man of 59, was admitted to the Verdun Protestant Hospital in July, 1942. There had been two previous admissions, one in 1937 for four months, and one in 1938 for two months.

Family History. There is nothing noteworthy in the family history except for the fact that one sister was "nervous" and "worried about the least trifle."

Personal History. As a child, H. W. C. seems to have been happy-go-lucky. He went only to public school. Later, he became a salesman with a big rubber company, with which he stayed for 33 years. His wife describes him as a born salesman. He was very successful and used to be sent out by the company for particularly tough jobs. He was always a good mixer and fond of company. He never drank unduly, nor did he smoke. Before his present marriage, he was married to a woman who died after seven years. There is one son of the first marriage who is a "very successful" soldier overseas. The patient's present wife has been married to him for 24 years. There is also a son, 21 years old, of this marriage; he is not conspicuous in any way.

Fifteen years ago, it was noticed that the patient became easily and unduly worried. Ten years ago, there were times when it was very difficult to get him out of bed. For the past 10 years, he has had alternations of mood from periods of excitement to periods of depression. During the "happy" periods, he would feel "on top of the world," and he contracted debts which he confessed only

during his worried periods. The wife never found out what he used the money for. She is sure that he did not go out with other women. Their sex relations were normal until a few years ago. About seven or eight years ago, he began during his "happy periods" to be "terribly irritable" and to go into tantrums on the least provocation and without any obvious motive. Although these tantrums were very bad, he never attacked anyone or destroyed anything. During the depressed state on the other hand, he became very meek. He felt guilty and had crying spells. He also began saying things, such as, "The Lord should take both of us." This would frighten his wife. He would get up at night with a flashlight and look at the clocks, having the idea that all the clocks "went wrong." Once he took for suicidal purposes, Friar's balsam and argyrol, for which he was sent to a general hospital for one week.

During the first mental hospital admission in 1937, he presented a typical picture of a depression. This cleared up within four months, and he was sent home on trial. At home, he apparently soon became very active. After three months, he had to return to the hospital. He was then somewhat overactive and very talkative. He said that he had been going to the races frequently "to buy the whole race track." At the same time, he began to talk about a conspiracy in which his son and the superintendent of this hospital were involved. To his wife, who came to visit him, he spoke vaguely about a "frame-up," and also began to believe that his wife was not really his wife but an imposter looking exactly like her. After his discharge and while at home, he recognized her again and told her spontaneously that while in the hospital, he had lost the feeling of her identity.

On his present admission, he showed physically a fairly good general appearance. There were, however, slight pyramidal signs on the right side and there was a mild degree of diabetes. Mentally, he was depressed, with feelings of guilt, and he was considerably retarded. Apart from his self-depreciatory and self-accusatory ideas, no definite delusions could be made out during interviews. He was distrustful of certain simple routine procedures in the hospital, and his wife told us that he had expressed to her again vague ideas of a "frame-up." Moreover, he had again the

feeling that she was a double, resembling her real self very closely, who was sent by some other people to visit him in the hospital. He never lost this feeling during his depression. He often would ask her questions as to their marriage date, etc., just to check up whether she knew it. When she gave correct answers he would say, "I cannot believe it is you, and yet, you can answer all my questions." He often asked her with a distrustful expression, "How did you get here?" or "Where did you come from?" At the same time, he insisted on her regular visits and was extremely unhappy when once in a while she did not turn up. When interviewed by his physicians about the question of the "double" and the plot connected with it, he became very evasive and noncommittal. At this time a Rorschach test was made, with the results shown in Table 3 and Figure 3.

TABLE 3. RORSCHACH TEST. H. W. C. NOVEMBER 30, 1942

4:58 P. M.

I.	7″	Two birds, wings	W	F	A	
II.	15″	Two elephants or dogs (doing something)	W	FM	A	P
III.	58″	Somebody holding up two rats	W	M	H	P+O
IV.	25″	Rej.				
V.	20″	Donkey, holding something	W	FM→M	A	
VI.	23″	Gasoline station	W	F	arch.	O
VII	30″	Two women looking at one another	W	M	H	
VIII	18″	Clothesline with clothes on	W	F	obj.	
IX.	22″	Two ferocious men looking at one another (orange)	D	M	H	
X.	40″	Two insects looking at one another (blue blots at the side)	D	FM	A	P

5.12 P. M.

$$R=9$$

$$T=840''$$

$$\frac{T}{R}=93''$$

$$A_b=21$$

$$A_c=30$$

$$\frac{F}{R}=33\%$$

$$\frac{FK+F+Fc}{R}=33\%$$

$$\frac{A+Ad}{R}=44\%$$

$$P=3$$

$$O=2$$

$$(H+A):(Hd+Ad)=7:0$$

$$\text{sum } C=0$$

$$M:\text{sum } C=3:0$$

$$(FM+m):(Fc+c+C')=3:0$$

$$\frac{VIII+IX+X}{R}=33\%$$

$$W:M=7.3$$


R W D D S
M FM M K K FK F Fc c FC' C' FC CF C

FIG. 3.


R W D D S
M FM M K K FK F Fc c FC' C' FC CF C

FIG. 4.

In the beginning of 1943, H. W. C. received a course of electric convulsive treatment, consisting of six major seizures. Immediately after this, his depression cleared up entirely. He is now euphoric, irritable and somewhat restless. He reads the papers in order to plan big sales campaigns and insists on his immediate discharge. He has refused to take part in occupational therapy activities. He acknowledges his wife's identity without any question. When interviewed about his previous illusions, he again becomes very evasive, and brushes aside all questions pertaining to his previous psychotic content with answers such as, "That's all over now and is done with." During the present stage the Rorschach findings were as shown in Table 4 and Figure 4.

TABLE 4. RORSCHACH TEST. H. W. C. APRIL 1, 1943

6.21 P. M.						
I.	45″	Two birds—what are they up against?	W	FM	A	
II.	20″	Two bears fighting	W	FM	A	P
III	80″	Two birds starting to fight	W	FM	A	
IV.	50″	Two feet, size thirteen	D	F	Hd	
V.	60″	Donkey, with two men hanging on	W	FM, M	A, H	
VI.	25″	Rug handing up on pole (like bear fur)	W	cF	A, obj.	
VII.	20″	Couple of cats fighting	D	FM	A	
		Two women staring at one another	D	M	H	
VIII.	45″	Two animals climbing up something	D	FM	A	P
IX.	30″	Rej.				
X.	45″	Two crows (gray top) staring at one another)	D	FM	A	
6.34 P. M.						

$$R=10$$
$$T=780''$$
$$\frac{T}{R}=78$$
$$A_b=40$$
$$A_c=44$$
$$\frac{F}{R}\%=10\%$$
$$\frac{FK+F+Fc}{R}=10\%$$
$$\frac{A+Ad}{R}\%=70\%$$
$$P=2$$
$$O=0$$
$$(H+A):(Hd+Ad)=9:1$$
$$\text{sum } C=0$$
$$M:\text{sum } C=1:0$$
$$(FM+m):(Fc+c+C')=7:1$$
$$\frac{VIII+IX+X}{R}=20\%$$
$$W:M=5:1$$

Discussion of Case 2

This is a case of manic-depressive psychosis, complicated perhaps by some organic impairment (unilateral pyramidal signs) in a man of 59. In this case, one sees again the phenomenon in which a person to whom the patient has a strong emotional attachment becomes during certain phases of the psychosis a "double" whose rôle is played by an "imposter."

This case differs from the original description of the French authors not only by the fact that it is a male patient but also by the fact that it is a case of manic-depression. In other words, if Capgras' syndrome is a true genetic entity at all, it comprises the illusion of the double which forms an essential part in the development of a schizophrenic psychosis.

In the second case, the phenomenon occurred during a hypomanic phase as well as during a depressed one; however, it assumes a much more accidental peripheral position in the symptomatology of the disease, very much as paranoid symptoms do in manic-depressive psychoses as a whole. This observation is also borne out by the Rorschach findings in this case which do not betray the presence of specific morbid experiences, as they did in Case 1. The main change that took place following electric shock treatment—when the patient passed from a depressed into a hypomanic irritable stage—was an enormous change in the F% and the relation between kinaesthetic responses to those of pure form.

SUMMARY

Capgras' syndrome is a term used in the French and English literature to designate a peculiar illusion—the patient experiences persons of his environment as their "doubles" and loses the feeling of their identities. The case of a schizophrenic woman, who exhibited this phenomenon strikingly, is described. There was a history of paranoid psychoses in the ancestry. The patient's mother also suffered from the illusion of the "double."

The psychological and genetic aspect of this case is discussed. Certain elements in the development allow a psychoanalytical interpretation. The phenomenon itself, however, is closely related to certain basic disturbances described previously in schizophrenic patients ("transivitism." Wernicke; "lack of coenesthesia," Coleman).

What can be psychoanalytically interpreted is well substantiated by the "minus original" responses in the Rorschach record. Apart from this, the record provides an opportunity to study the significance of so-called "inside detail" (di) responses.

The second case is that of a manic-depressive man who exhibited the illusion of the "double" during two phases of his illness.

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EDITORIAL COMMENT

"I SWEAR BY APOLLO . . ."

The art and practice of medicine today are founded equally on a very modern science and a very ancient oath. Without modern science, medicine would still be, as it was in the middle ages, largely a mixture of well-meant magic and traditional empiricism. Without the ideals of its ancient oath, the most scientific medicine might well become—and there appear to be examples of this in Nazi Germany—an instrument of oppression, a weapon of death or an implement of torture, instead of the science of relieving the sufferings of mankind. It is with that oath that this comment will be primarily concerned.

The troubled middle years of the twentieth century may mark for historians millennia hence the closing of one great epoch of our civilization and the beginning of a new. It is pretty certain that the world to come will be very different, drastically and perhaps unpleasantly different, from the world we have known. The pressures of great change have been heavy on the profession of medicine for many years, upon its methods of research and treatment, upon the principles of its discipline, upon the economic and social security of its practitioners. There have been totalitarian attacks on scientific medical objectivity. A second world-wide war in a generation has disrupted its peacetime researches and peacetime services. Increasingly serious economic problems are presented, as the benefits made possible by modern research recede farther and farther from the reach of the average-income citizen.

The future of a learned profession in a time of great strain upon society will depend less upon its scientific achievements at the moment—for applied science can be disastrously misapplied, and the discoveries of pure science forgotten—than it will depend on the individual integrity and devotion of its practitioners. The individual integrity and devotion of the practitioner of medicine are pledged in the ancient oath which is attributed to Hippocrates.

Dr. Arthur N. Foxe, in this issue of THE PSYCHIATRIC QUARTERLY, treats of that oath and its significance for the modern medical man. It is not the intention of THE QUARTERLY to expand here on Dr. Foxe's very able discussion or to attempt to add to his arguments. But it does seem appropriate to add our own emphasis here to his belief that the Hippocratic Oath is a matter of psychiatric concern, that it can best be approached from the standpoint of psychiatry and that if it fails to meet modern professional

and ethical obligations, it is to the interest of psychiatry to work for a wider understanding of the situation among practitioners of medicine in general.

Dr. Foxe's discussion, is, of course, not the first we have seen of the Oath of Hippocrates in a modern setting. Perhaps most of us have heard—in reference to the pledge on veneration for the teacher, on that concerning abortions and on that to refrain from cutting for the stone—the somewhat childish play on words which holds the oath today to be hypocritic rather than Hippocratic. Certain it is that few who take the oath take literally and seriously the obligation to regard the teacher as a parent—for medicine today is not taught as it was taught 400 years before the Christian Era. Certain it is that many who take the oath will proceed without any sense of violating professional ethics to perform therapeutic abortions. And it is equally certain that many will become surgeons and perform the forbidden operation of cutting for the stone. Of course, it will be observed, it has been many a year since any member of the medical profession imagined the Oath of Hippocrates was to be taken literally. But that observation does not answer the question raised by Dr. Foxe's paper—as to whether an oath which cannot be taken literally can be taken seriously, or is even worth taking at all.

The Oath of Hippocrates is unique. There are no exactly corresponding oaths in the other black professions. A churchman's vows are specific dedication to the church or religious order to which he adheres; the oath for admission to the bar pledges allegiance to constitution and to law; only the physician undertakes a pledge which is primarily one to observe a professional and personal code of ethics—with his conscience the principal agent for enforcement.

There is little need to labor the historic value of such an oath. Its very survival through the centuries is evidence of its worth. But it seems time to question whether its value is not greatly impaired today.

The psychiatrist, even more than the churchman, is in a position to testify to the calamitous results of broken pledges, of promises which cannot be kept, of words uttered carelessly and dismissed lightly. The Oath of Hippocrates purports to be a most solemn obligation. It might be interesting to consider from a psychiatric point of view the formal assumption by the physician of a solemn obligation which he knows at the time he will not be able to discharge literally. And it might be pertinent to raise the question, as Dr. Foxe has done, of whether the invocation of long-dead gods has significant bearing on the understanding of the subscriber to the oath that he need not take it literally.

One need not follow the General Semanticists to their extreme of belief that conflict between words and the facts those words are supposed to represent is a potent cause of mental disorder, but may still recognize the fact that this conflict may be fruitful of tension, uncertainty and personal disorientation. With civilization at its present crisis, medicine might do well to avoid what can be avoided in the way of such tension, uncertainty and personal disorientation.

Today's profession cannot do without the ethics or without much of the specific content of the Hippocratic Oath and still remain medicine—the healing profession. Yet it cannot continue lip service to the literal meaning of the oath without a conscious or unconscious hypocrisy that bodes ill for medicine in the coming social crises. Dr. Foxe has proposed a revision or rewording of the oath to suit modern needs and meet modern conceptions of the duties and problems of the physician. He would sacrifice no whit of the ethical principles in the original pledge; and his proposal is well worth serious consideration by the profession.

But Dr. Foxe's proposal is not the only possibility. The solemnity of an ancient rite has impressive value which may be lost by simple modernization. It might be worth consideration as well if some appropriate ceremony could be devised, involving perhaps the recitation of the original oath in the Latin of the medieval schools or in the classic Greek, with the young physician subscribing thereafter to a modern version in translation, setting forth the ethical principles of professional and personal conduct according to conditions as they exist today.

There is ample precedent for this sort of ritual. In the remote days when Sargon of Akkad led his rebels to the founding of an empire in the land between the two great rivers, his followers spoke a Semitic tongue, alien to and unrelated to the language which had already been current in the great cities of Sumer for a thousand years. His conquering Semites, like the men of William of Normandy, ruled and spoke among themselves in the tongue their forefathers had brought from the Arabian deserts; but they worshiped the ancient gods of their conquered land in the language of the men they overthrew. And two millenia later, when new dynasts ruled in a Babylon of uncounted wealth and luxury and power, their Semitic-speaking people still prayed to the old gods in the tongue of long-dead Sumer, which none but the priests and astronomers then understood at all. In our own day, a stride through history of another two thousand years and more, the Catholic church has retained, in its rituals, the dead Latin of the Roman Empire's early Christians. And the Passover service, one of the most ancient religious ceremonies to be preserved by any people to modern times, may be conducted by the English-speaking orthodox Jew

in the ancient Hebrew, with a translation for the unlearned available in the modern vernacular.

There are doubtless other possibilities than these. But the word and the deed need harmonizing if time-honored medical ethics and modern medical practice are to be forged into any unity adequate for the meeting of a difficult and doubtful future. We submit here that the question is a grave one which would fully justify the appointment of a special committee of the American Medical Association to consider possible revision of the oath —and that psychiatry and psychiatrists would do well to extend their friendly offices for study and solution of the problem.

BOOK REVIEWS

Freud, Master and Friend. By HANNS SACHS. 195 pages. Cloth. Harvard University Press. Cambridge, Mass. 1944. Price $2.50.

This is a timely book from the pen of Dr. Hanns Sachs, a pupil and friend of Sigmund Freud. Its preparation was a duty of the author, for no one now living, with the possible exception of Ernest Jones, knew Freud intimately enough during the early days of his career to record the facts which will be of interest not only to present-day readers but to others who will come afterward.

Sachs was one of those earnest young students who, becoming attracted to psychoanalysis, attended the gatherings of the first group which used to meet in Vienna on Saturday evenings at the Psychiatric Clinic. He was not only a diligent student and attendant but he became an intimate friend of Freud, spent much time in his house and in his company. What he has written here constitutes a background against which the writings of Freud can be best seen and appreciated. The latter's diligent habits of work from early morning until midnight, the painstaking care with which his writings were revised until the expressions and choice of words were entirely to his satisfaction present Freud to the world as a studious and painstaking worker. He was versed in the literature of the world. "He was ready to expand his studies and to enter various and widely different fields of knowledge whenever he found it of use for his research. For instance, he read a vast number of psychological and philosophical authors, old and new, when he finally prepared his *Interpretation of Dreams*. For the *Wit and Its Relation to the Unconscious* he worked his way through a big mound of aesthetic and philosophical treatises, besides reading all authors famous for their wit or humor, such as Rabelais, Cervantes, Molière, Lichtenberg, Heine, Nestroy, Mark Twain, and Spitzer, not to speak of the numerous collections of jokes, compilations of folklore-stories and the like."

Of much interest, is the chapter entitled "In the Arena" in which Sachs discussed the "schisms" which developed in the psychoanalytic school, beginning with Breuer and including Stekel, Jung and Rank. Freud was distressed by these secessionists, because he believed that their theories and speculations were erroneous; and he was fearful that an effort would be made to include them in the body of psychoanalysis, which Freud was determined to protect and keep free at any cost from heresies such as theirs. When these defections were taking place some, who were not fully acquainted with the circumstances, assumed that Freud was an arbitrary and despotic

schoolmaster who exacted implicit obedience in thought and word from his disciples. The enemies of psychoanalysis took advantage of these controversies to claim that psychoanalysis had run its course, that it was breaking up and soon would be heard of no more. One of Sachs' chief concerns was to remove this wrong impression of Freud's character. He recognizes it as the inevitable friction which develops between the leader and his chief associate, between the king and the crown prince, between the father and son, and expresses some disappointment that Freud did not appreciate the inevitability of the situation, which he seems to have recognized only to a degree, not fully. "Freud knew all this but his passionate desire to leave the future of psychoanalysis in trustworthy hands was strong enough to get the better of his theoretical knowledge and hard-won experience."

Dr. Sachs has done a noteworthy piece of work with this book. His devotion to Freud is, of course, evident all through it, but he has succeeded in presenting all sides of the character of his hero and has succeeded in making his book an interesting portrayal of a genius; one who lived long enough to see his work appreciated by institutions of learning and groups of students in many parts of the world but who could not escape the penalty of all genuises, that is, to be reviled and misunderstood.

The People of Alor. A Social-Psychological Study of an East Indian Island. By CORA DU BOIS. With analyses by Abram Kardiner and Emil Oberholzer. 654 pages with index. 81 halftone illustrations, 17 line cuts of children's drawings and photographic reproduction of the Rorschach cards. Cloth. The University of Minnesota Press. Minneapolis, Minn. 1944. Price $7.50.

"The People of Alor" is the result of an extraordinary and perhaps unprecedented collaboration of a group of social scientists. Into its making have gone the results of a joint seminar conducted by the author and Dr. Abram Kardiner, psychiatrist and psychoanalyst, at the New York Psychoanalytic Society; two years of field work by Dr. Du Bois herself, an analytically trained anthropologist; and digestion of her field data by the joint seminar of Dr. Kardiner and the anthropologist, Dr. Ralph Linton, following Miss Du Bois' return to this country from the Dutch East Indies. In addition, Dr. Kardiner contributes to the volume his analyses of Alorese culture and individual case histories; and Dr. Emil Oberholzer, to whom we owe the firm establishment of the Rorschach examination as a valuable clinical instrument after the death of its originator, gives a 52-page analysis of the Rorschach records of 37 Alorese. Besides these formal, signed contributions, Mrs. Trude Schmidl-Waehner, Austrian artist with psycho-

analytic training and much experience in the study of personality factors revealed in children's art work, collaborated in the analysis of the children's drawings brought from Alor by Dr. Du Bois; and the results of the Porteus maze test were analyzed by Dr. Porteus, its author.

This awe-inspiring collection of talent includes only those who made formal contribution to the work. In the preface, Dr. Du Bois expresses indebtedness to Drs. Ruth Benedict, Margaret Mead, Gregory Bateson, Bruno Klopfer, R. H. Lowie and others. The universities of Columbia, Leyden, California and Minnesota contributed funds, advice and printing facilities. The expedition and publication of its results were made possible by financial contributions by Dr. Kardiner, the American Council of Learned Societies, and the Coolidge Foundation. "The People of Alor" is what might reasonably be expected from such exceptional workers and exceptional backing. That is, it is a distinguished contribution to social science, to the knowledge of man and his behavior and motivation; its publication probably is a landmark in ethnology; and the method of its organization, field work, analyses and reporting seems likely to be a model for studies of primitive societies for years to come.

The objectives of this study were rigidly limited, before field work was undertaken, to the middle ground which is shared between anthropology and psychology, to the relationship between a people and their institutions, to character in the light of beliefs and customs; to personality organization as determined or influenced by culture. The people studied are agriculturalists living on a little-known tropical island north of Timor. They are chiefly Oceanic Negroids, with strains of Oceanic Mongolian blood, and the physical types include the so-called pseudo-Semitic (pseudo-Hittite or pseudo-Armenian might be better). Their social system and religion seem to have been little affected by contact with Netherlander or Malay, although the Dutch have virtually suppressed head-hunting and once changed by force the location of the village which Dr. Du Bois studied. Involved financial transactions play a most important part in the agricultural society of these islanders; and, as the author herself notes, this makes the results of the present research of great interest to economists as well as anthropologists, psychologists and psychiatrists. The position of women in this culture is high. They are responsible for the fields, which both men and women may inherit, and thus have control of subsistence. While it is true that marriage is by purchase of the woman, the bride may leave her husband and let him litigate for return of the purchase price; she may refuse intercourse if she thinks the price is not high enough; she seems to be less interested than her husband in having children; and her position in the family and social organization seems at least as firm as his.

Dr. Du Bois had to study Dutch and Malay and finally the language of the Alorese themselves to conduct her researches; and, although she learned the native tongue, she used an interpreter from this language to Malay throughout her stay. She is exceedingly frank about, and perhaps places unnecessary emphasis on, this language handicap which must have been compensated for to a great degree by the wide variety of investigative techniques and tests she used, providing check and counter-check upon each other. If there is a place where the screening of information through two languages and a male interpreter might distort the picture, it may be in the field of sex and sex relationship. The author's own point of view is of interest here. Setting forth that she assumes the psychic unity of mankind and holds that certain experiences and tensions are common to all humanity, she notes, "The Freudians have stressed sex among such tensions, others may be of equal importance." Fantan, her interpreter, had a frank sexual interest in, and sexual curiosity about, the ethnographer; he also had come into contact with foreign cultures, notably the Malay, with sexual mores and manners differing from the Alorese; and Dr. Du Bois' picture of sexual life on Alor was necessarily derived through Fantan's interpretations or at least through persons interviewed in his presence. As thus seen, Alorese children have great sexual freedom; there are no painful puberty rites; the young adult is sexually well informed; marriage is polygamous; but the wife is an important figure and wields much real power and influence; conflict between a man's wives, divorce and adultery appear frequent. In comment on the biographical material of the volume—there are eight complete biographies covering 356 pages—Dr. Kardiner notes that the four men reported all have "unsatisfactory relations with women." Poor maternal care and the superior economic position of women seem to contribute to male frustration, inhibitions and insecurity. Dr. Du Bois finds evidence in her children's drawings of "either very strong castration fears or their opposite, an absence of concern about sex;" and she suspects the latter to be the explanation. Noting that neither boys nor girls drew the female sexual organs "on any occasion," though both drew females with male organs, she says, "This may suggest that sexual tension, slight as it is, centers around the female." For those who care to differ, the author presents the drawings, the general anthropological data and the specific biographical material from which a student, perhaps with reservations concerning the circumstances of interviewing and interpretation, can draw his own conclusions.

Familial, social and economic organization apparently combine to build up personality patterns characterized by frustration and insecurity. The individual constantly makes demands of human objects which can only be

frustrated. The man in particular is insecure. Dr. Kardiner expresses the opinion that only the general fear of aggression, the fact that the cohesion of society is vested economically in the woman, and the threats of a primitive, compulsory religion keep such a nearly anarchic social structure from collapse.

"The People of Alor" should be mandatory reading for current planners of social reorganization. The scientist whose own interests are touched upon will need no urging to study it. The eight biographies are treated much in the fashion of psychoanalytic case histories; they include numerous reports of dreams and their interpretations, a matter of particular interest to psychiatrists. The word association tests devised and used by Miss Du Bois are also in this field, and the report of children's drawings pertains to the specialty of child psychiatry. Both psychiatrist and psychologist will find material of value in Dr. Oberholzer's Rorschach interpretations, with the confirmatory evidence from this test supplementing the ethnological conclusions that determinants and organization-pattern of the Alorese character differ widely from ours.

Marriage and Family Relationships. By ROBERT G. FOSTER. 314 pages with appendices and index. Cloth. The Macmillan Company. New York. 1944. Price $2.50.

This is a volume of information and advice for young persons recently married or planning marriage. The author is director of the family life department of the Merrill-Palmer School in Detroit, and he has had wide experience in teaching and counseling. His present book is devoted to the personality problems and interpersonal problems of marriage; it is well-planned and well-written; and its contents cover the life and development of the individual through childhood, adolescence, courtship and marriage itself, with discussion of the coming of children and the relation of the family to our democratic society.

The point of view of this work seems to be that of "common sense," although this may be an injustice to the author who does not emphasize and, possibly, does not even employ the term. By "common-sense" information and advice, this reviewer means the sort which a kindly and tolerant Mom or Dad or Great-uncle George might give from a background of a good deal of reading and a long life of well-digested experience. Well-organized and in printed form, this sort of advice is probably more palatable in a book than from a relative, no matter how highly revered. "Marriage and Family Relationships" thus promises to be of use and of value to many young persons in our war-torn society.

But the trouble with "common-sense" instruction and advice is that while it is usually wider than the barn door, it is seldom so deep as the well; and great breadth and little depth in matters psychological frequently do not serve. It is all very well to explain and emphasize the obvious—such as the fact that the success of a marriage depends largely on the degree of emotional maturity of the marriage partners—but it is also important to understand what emotional immaturity is, how its pattern is created and perpetuated, what its symptoms are, and how likely all these things are or are not to be affected by marriage. We hear much of the greatly increased sophistication and worldly wisdom of modern youth, of changing ideals and changing mores; but we feel rather sure that some young men still enter marriage convinced that a fiancée's behavior pattern of tantrums will be changed by making her a wife, and that there are still young women with the Victorian idea that one can reform the brute by a ceremony giving social or religious sanction to the act of sleeping with him. Something more than applied "common sense" is required if realistic attitudes are to be adopted here.

"Marriage and Family Relationships" gives little idea of the real bases, the usual courses, or even the usual signs and symptoms of the more common mental and emotional states. How does one react to or deal with forces of which one has no understanding, or which one may not even recognize? A "common-sense" treatise is not too helpful here. On page 35 of "Marriage and Family Relationships" is a discussion of mechanisms by which persons "run away" from disagreeable situations and emotional difficulties, among examples of which the author cites projection, negativism and rationalization. Under "negativism," he mentions "adjustment by the use of ailments," giving as an instance the student who "acquires a severe headache and general indisposition" which prevent him from taking a final examination. "His *feigned* illness [the Italics are the reviewer's], often very real in its symptoms, has been used to escape from meeting an intolerable and difficult situation." One may, perhaps, assume a slip of the pen in this implication of conscious malingering, but the result does not seem calculated to encourage either intellectual insight into, or reasonable reaction to, a very common and not altogether trivial hysterical symptom. Elsewhere in the book is also the inference that by taking thought and exercising determination a person can rid himself of this and other behavior patterns of emotional immaturity, a viewpoint which, it may be submitted, would tend to build up blame and guilt, rather than harmony, in marriage.

Perhaps one should not complain because a work of this sort is not a textbook of mental hygiene or an outline of psychopathology. But an exposi-

tion of the closest interpersonal relationship known to our society might profitably give more than a hint of the structure of the individual personality, of the unconscious which forms its basis, of the mechanisms and results of unconscious motivations. Even the most general understanding of how and why people behave as they do might well make the difference between tolerance, sympathy and helpfulness in a marriage and a life of bickering, blaming, reproaching and tension. "Marriage and Family Relationships" not only fails to give this general understanding; it gives no understanding of the unconscious at all; and it seems possible, from a reading of this text, that the author does not recognize its existence.

This failure to place the discussion on the broadest possible basis has specific and serious limitations. The author takes up, for example, such not-infrequent difficulties of the early months of marriage as ejaculatio praecox, impotence and incomplete erection. He remarks in a "common-sense" way that it "takes weeks and sometimes months of experience and practice, under the tense excitement of sexual conduct, to be able to control the time of ejaculation. . . . Do not worry, but practice mental self-control . . . the thing to do is not to feel badly, but to relax a little while and try again or wait until morning or the next evening." Except for the fact that the subject probably will not be able to avoid worrying or feeling "badly," this is all right as far as it goes—but it gives no hint of the fact that the sexual disturbances listed may be something other than the superficial variety which can be dealt with by these means, and that they may be symptoms of deep-seated personality disturbance which not only calls for professional assistance but may even require major psychotherapy.

It would seem that a truly adequate guide to the personality problems of a relationship which by the very conditions of our culture presents difficulties to everybody entering it should cover the deeper layers of personality structure and the deeper motivations, as well as point the way for those persons who need more than "common-sense" advice to find the help they need. Any psychiatrist's files would show instances of marriages where "common sense" failed but where adequate professional advice and treatment might have established satisfactory relations. "Marriage and Family Relationships" is an excellent volume for persons whose adjustments are already better than average and whose problems promise to be superficial; it does not meet the really great need for a guide for persons whose adjustments at best are no better than average, who need to know why both they and their marriage partners behave as they do, and who need to know where the limitations of "common sense" are found and professional help is indicated.

Personal Mental Hygiene. By Dom Thomas Verner Moore, O. S. B., M. D., Ph.D. 331 pp. Cloth. Grune & Stratton. New York. 1944. Price $4.00.

Dom Thomas Verner Moore occupies a place in American psychiatry that is almost entirely his own. A teacher of psychology and psychiatry in the Catholic University of America at Washington, D. C., he is an ordained priest. His writing appears to be prepared for the benefit of college students and others interested in social welfare and education. For these groups the book is admirably suited. Dr. Moore is not a Freudian, although he makes use of many of the mental mechanisms which are usually associated with that discipline and which are necessary for the elucidation of his topic.

The author discusses the problems that arise in the emotional life of an individual, beginning with childhood and following through to later years. Certain practical situations are discussed in separate chapters, such as the overprotected child and by contrast, the rejected child. His style is pleasant and readable. He illustrates his points with numerous examples taken from his clinical practice.

"Personal Mental Hygiene" will doubtless be well received by the public and enjoy the same reputation and popularity as Father Moore's other books on related subjects.

Account Rendered. By Vera Brittain. 339 pages. Cloth. The Macmillan Company. New York. 1944. Price $3.00.

Men have pondered the horror, the waste, the cruelty, the stupidity of war since the warm blood of the first victim called for vengeance on the red slayer from the ground. There have been uncounted grandiose schemes to prevent war—alliances, peace enforced by successive imperial powers, efforts to assert religious authority, leagues and covenants, and the international equivalent of taking the pledge, promising by treaty, never, never, never to do it again. There have also been the quiet voices of individual protest, raised by the conscientious objector, the Quaker, the preacher, or the writer of books. In the 1920's, following the first World War, there was a surge of such literature—"All Quiet on the Western Front," "The Sun Also Rises," "The Case of Sergeant Grisha." If men only realized the horror, the suffering, the futility of war, their writers seemed to say, humanity would refuse to suffer such a catastrophe again.

In those years, after a background of service from 1914 through 1918 as a Red Cross nurse with the British forces, Vera Brittain wrote "Testament of Youth." Today in "Account Rendered" she again stresses the theme of the suffering caused by war and the need of the individual who is convinced of the futility of war to play his part, great or small, for the relief

of those hurt by it. The story she has to tell is psychological. Francis Keynsham Halkin, young British second lieutenant, was buried alive by a shell, then suffered a fugue during an attack on the German lines in the first World War. His amnesia, undetected at the time, returns to balk his musical career after the armistice; and a psychiatric breakdown in middle life after the pressure of the new war becomes acute is the central incident of the novel. An account of the psychiatric defense in a British trial for murder and one of the bombing by Nazi planes of an institution for the criminal insane are matters of interest to the psychiatrist.

Miss Brittain's theme is a great and moving one. It is with regret that one sets down the impression that her handling fails to do it less than justice, for she is an accomplished literary craftswoman. Her characters seem flat, her people lifeless, her psychopathology of suspicious validity. It seems possible that she was too absorbed, too moved, by her own theme, to develop it in a fashion to absorb and move others.

Behavior and Neurosis. By JULES H. MASSERMAN, M. D. 269 pages. Cloth. The University of Chicago Press. 1943. Price $3.00.

The author gives a forthright statement of his purposes in publishing this book in the opening sentence of the preface: "It is my primary purpose in this volume to describe a series of experimental studies of animal behavior carried out during the last seven years in the neurophysiological laboratories . . . of the University of Chicago." Dr. Masserman is a pupil of Adolf Meyer but he also gives acknowledgment to Dr. Walter Scholler and Franz Alexander, as well as others.

It is a record of his laboratory work, describing the methods and apparatus employed in neuropsychologic investigations of behavior. A good deal of space is devoted to the conditioned reflex concepts and their application to human behavior.

In an historical introduction which is of unusual interest the author, by quotations from classical authors and more recent experiment in the field of philosophy and psychology, confirms the unity of the psyche and soma and lays a foundation for the understanding of psychobiologic principles of behavior. It is interesting that he goes a step further than merely setting up abstract theories as to behavior patterns. He discusses principles of substitutive or symbolic behavior and seeks to check theory against laboratory experimentation. There are a number of illustrations showing the apparatus employed, the steps in progress in some of the experiments. There is an extensive bibliography (37 pages) showing how thoroughly previous writings have been reviewed and there are indices of authors and subjects.

The book is a scholarly presentation of experiments carried on in the laboratories of the University of Chicago. It is predicted that it will of necessity be consulted by future writers on psychosomatic medicine.

Psychoanalysis Today. Edited by Sandor Lorand, M. D. 404 pages. Cloth. International University Press. New York. 1944. Price $6.00.

This timely volume is made up of articles by some of the best known writers in the field of psychoanalysis. It seems to have been prepared as a memorial to Sigmund Freud to whom it is dedicated. It also marks the fiftieth anniversary since Freud made his initial contribution to mental science and particularly to psychiatry. Psychoanalysis developed so rapidly and covered so wide a field that it was unavoidable for confusion of thought to arise.

The psychiatrist, the general physician, the anthropologist, the student of art, the teacher, all recognized definite applications of the theory to their particular interests, and many quickly organized their thoughts and theories along the lines of Freud's presentation. It has been said that scarcely a department of thought or of science but has received illumination from this source. It is for these reasons that the rapid growth of psychoanalysis was in some respects bewildering.

The present volume will help to organize thought on the subject as it applies to various fields of human activity. Whatever such organization can be expected at this time will, of course, be but temporary. Progress is still too rapid to make permanent form possible or even desirable; but, at least for the year 1945, we have before us in this volume the concepts and conclusions which are acceptable to the best qualified observers and teachers of psychoanalysis.

For all who are seeking this light, the book is recommended. It is a useful compendium and may well find a place in every up-to-date psychiatric library.

Infants Without Families. By Anna Freud and Dorothy T. Burlingham. 128 pages. Cloth. International University Press. New York. 1944. Price $2.00.

Anna Freud and Dorothy Burlingham have made special studies of infants and small children. Their contributions have been based upon the psychoanalysis of children, and they have been concerned by the number of homeless children to be found in the countries involved in the present war. Conflicting theories exist as to whether the parentless child can best be provided for in an institution for children or whether adoption in private families is to be advocated. For a number of decades, opinion has

shifted more and more away from the orphan asylums of an earlier day in the direction of infant adoption. There are those who now believe that institutions should be made use of only for children who are unsuitable for adoption, but just what is to be included in that concept of unsuitability is not generally agreed upon.

In the present volume, the authors take up the psychology of childhood. They have made particular studies of children's trends and strivings and of the instinctual satisfactions and frustrations. The rôles of the mother or the mother-substitute and of the father or the father-substitute are considered.

In this small volume, are recorded many interesting observations throwing light upon the attitudes of children—the masculinity of boys, the femininity of girls, and the emotional reactions of children to each other and to adults within their *milieu*.

Christian Behavior. By CLIVE STAPLES LEWIS 70 pages. Cloth. The Macmillan Company. New York. 1944. Price $1.00.

This little volume is a record of a series of radio broadcast talks given in England by the author of the well-known "Screwtape Letters." Twelve of the talks have been revised and enlarged into short essays. Typical titles are "The 'Cardinal Virtues,'" "Social Morality," "Forgiveness," "Charity," "Morality and Psychoanalysis."

It is to be regretted that the author does not comprehend his psychoanalysis more completely. If he did, he would not say that the philosophy of Freud is in direct contradiction to Christianity and also in direct contradiction to that of that other great psychologist, Jung. It is true that Jung, who was once an ardent pupil of Freud, seceded and established a psychology of his own. The latter, however, is based upon Freud's teachings, and it could hardly be said that Jung is a greater moralist than is Freud. If anyone cares to read a book about Freud entitled "Freud, Master and Friend," reviewed in this number of THE QUARTERLY, he will acquire a more understanding opinion of the high morality of Freud and can learn something from him on this subject.

The series of broadcasts upon which this little book is based was popular, and the English edition has already exceeded 77,000 copies, so it is quite evident that it fulfills a recognizable need. This is all the more reason why the author should be on his guard not to make statements which will be misleading.

Other Publications Received

EPILEPSY—THE GHOST IS OUT OF THE CLOSET. By Herbert Yahraes. With the assistance of Dr. Jerry Price, Neurological Institute and Baird Foundation Clinic, New York, N. Y., and Dr. William G. Lennox, assistant professor of neurology, Harvard Medical School. 31 pages. Paper. Public Affairs Pamphlet No. 98. Public Affairs Committee, Inc. New York. 1944. Price 10 cents.

This pamphlet is a forthright discussion in simple language of one of the most serious medical problems of our day. It is not sensational and is admirably adapted for the reading of victims of epilepsy, their relatives or friends. The tone is hopeful, and the scientific background is more than guaranteed by the authority of Drs. Price and Lennox.

The Association to Control Epilepsy, Inc., assisted the Public Affairs Committee in the preparation of this booklet. The association is also making a limited distribution to a selected list of free booklets in pocket format, identical in text and illustrations with the regular Public Affairs pamphlet, but of 47 4″x6″ pages instead of 31 pages, 5⅜″x8⅜″.

This pamphlet is an important project for public education in the mental hygiene field. Psychiatrists and others who recognize the importance of greater general information on epilepsy will be interested to note another recent effort in this direction, the devoting of three of the four pages of the November, 1944, issue of the "Bulletin" of the Massachusetts Society for Mental Hygiene to a discussion of "Mental Hygiene and the Epileptic" by Dr. Lennox. This article is also worthy of the attention of everybody interested in spreading accurate public information in this field.

NEWS AND COMMENT

DR. WILLIAM W. WRIGHT DIES IN UTICA AT 71

William W. Wright, M. D., former superintendent of Marcy State Hospital, died in Utica on October 28, 1944, after a long and noteworthy career in the State hospital service. He had retired as head of Marcy to enter private practice in Utica almost exactly a year before, on October 31, 1943. Dr. Wright was 71 years old. He had been ill for only a short period.

William W. Wright was born in Le Roy on October 17, 1873. After a public school and normal school education, he was a school principal at Bangor for four years before studying medicine. Graduated from the University of Michigan Medical School in 1904, he entered the State hospital service at Buffalo in 1906. He had five years of service at the Psychiatric Institute under Drs. Hoch and Kirby; and he always retained an active interest in research and scientific developments, in neurology as well as in psychiatry. He served at various times as an instructor in psychopathology at Cornell Medical School and as a lecturer in psychiatry at Syracuse University Medical School.

Dr. Wright made many contributions to scientific journals and was active in his professional societies, serving at one time as president of the Utica Academy of Medicine. He did much work with bromides in psychiatric and neurological conditions, was an important contributor to research into their use, and was recognized as an authority on the subject. With the exception of a year during which he held the title of superintendent of Pilgrim State Hospital but served as acting medical inspector, Dr. Wright was in charge of Marcy from 1926 until his retirement. From 1926 to 1930, he headed the then Marcy division of Utica State Hospital, with the title of first assistant physician at Utica; in the latter half of 1930 and the first half of 1931, he served as medical inspector, since Pilgrim was not yet completed; and in July, 1931, he returned to head Marcy, transferring as a superintendent to the new separate institution.

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TWO CONFERENCES CONDUCTED BY DEPARTMENT

The first fall conference of the New York State Department of Mental Hygiene was at Hudson River State Hospital, Poughkeepsie, on October 17 and 18, 1944, and the regular Quarterly Conference at the Psychiatric Institute and Hospital in New York City on December 12 and 13. Institution business officers were present at the Poughkeepsie conference, in addition to directors and others; and pathologists of the institutions attended

the Quarterly Conference as well as directors. Administrative as well as medical matters featured the fall conference discussion, which included separate and joint round tables of directors and business officers, as well as a scientific session.

Lt. Comdr. H. Beckett Lang, U. S. N. M. C., was among the December meeting guest speakers. Commander Lang is assistant commissioner of the Department, on leave for naval service. Besides administrative and scientific meetings, a feature of this conference was a session of the pathologists at which Deputy Commissioner Newton J. T. Bigelow, M. D., presided, and at which technical and practical problems of institution laboratory work were discussed.

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FOURTH HOSPITAL FACILITY TURNED OVER TO ARMY

The leasing of partly completed Edgewood State Hospital at Deer Park to the army marks the fourth facility turned over by the State Department of Mental Hygiene for war purposes. The hospital, of which Deputy Commissioner Newton J. T. Bigelow, M. D., is superintendent, has seven buildings completed so far, with accommodations for 2,300 beds.

Mason General Hospital was previously opened by the army in buildings constructed as a unit of Pilgrim State Hospital and providing 1,528 beds. It is an important center at present for the training of army doctors in neurology and psychiatry. The other two facilities leased are the new Willowbrook State School on Staten Island, which has become an army general hospital with 2,870 beds, and a number of buildings at Rockland State Hospital, with accommodations for 1,068 beds.

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NEW CHILD HELP FOUNDATION IS INCORPORATED

The Foundation for Child Care and Nervous Child Help, Inc., has been incorporated in New York State with Dr. Leo Kanner of Johns Hopkins University Medical School as president and Dr. Ernest Harms, editor of "The Nervous Child," as director for the first period of operation. The foundation's ultimate objectives include a school for several hundred mentally subnormal children in New York City and a national institution for prepsychotic and predelinquent children, besides educational courses and publications for social workers, nurses, parents and teachers. Besides Dr. Kanner and Dr. Harms, directors of the new foundation include Drs. Harry Bakwin, Violet De Laszlo, J. Louise Despert and George Henry, and Justice Jacob Panken.

GRAEME M. HAMMOND, M. D., IS DEAD AT AGE OF 86

Graeme M. Hammond, M. D., former president of the American Neurological Association and professor of neurology for many years at the New York Post-Graduate Medical School and Hospital, died in that hospital on October 31, 1944, at the age of 86. Dr. Hammond, son of William A. Hammond, who was surgeon general of the Union army during the Civil War, was born in Philadelphia on February 1, 1858. After attending the Philadelphia public schools, he studied at the Columbia University School of Mines for three years, then entered New York University Medical College from which he was graduated in 1881. He entered Post-Graduate Hospital as an interne and was connected with that institution for most of his life.

Dr. Hammond served as a major in the medical corps of the United States Army during the first World War and was considered an authority on the rehabilitation of psychiatric casualties. He was a noted athlete, the holder of track records as a Columbia undergraduate, a bicyclist, amateur wrestler and boxer, and for several years national fencing champion. When he was over 50, he competed on the 1912 American Olympics fencing team. He had been president of the Amateur Fencing League of America, the American Olympics Association and the New York Athletic Association.

Dr. Hammond's presidency of the American Neurological Association was during 1911 and 1912. He was a life member of the American Psychiatric Association and a member of the national, state and local medical societies. Besides his numerous professional, athletic and society activities, he found time to study law and was graduated from the New York University Law School in 1900. He was one of the medical men called as an expert witness in the Harry Thaw murder trial and was much in demand for expert testimony in other cases.

NATIONAL COMMITTEE HAS 35TH ANNUAL MEETING

The first annual Lasker award of $1,000 was presented, for an outstanding contribution to the mental health "of the men and women of our armed forces, to Col. William C. Menninger, chief consultant in neuropsychiatry, of the United States Army at the 1944 annual meeting of the National Committee for Mental Hygiene. Brig. Gen. Raymond W. Bliss, assistant surgeon general of the army, made the presentation with a citation. The annual meeting of the national committee was its thirty-fifth and was held in New York City November 8 and 9. Mental hygiene problems of the war at present, of industrial reconversion and of rehabilitation of service personnel were featured in discussions at the meeting.

ASSOCIATES HONOR DR. BRILL ON 70TH BIRTHDAY

Some 300 friends and associates met at a dinner in honor of the seventieth birthday of A. A. Brill, M. D., at the Waldorf-Astoria in New York on October 12, 1944. It was announced that a fund of approximately $6,000 had been raised in honor of Dr. Brill and that he would endow a library with it. The library in the new building of the New York Psychoanalytic Institute will be named in his honor, it was also disclosed at the dinner. Speakers at the dinner included Dr. C. P. Oberndorf, toastmaster, Dr. Leonard Blumgart, Dr. Leo H. Bartemeier and Dr. Harry Woodburn Chase.

DR. YOUNG IS NEW ACTING MEDICAL INSPECTOR

Bascom B. Young, M. D., assistant director of Harlem Valley State Hospital, was named acting medical inspector of the New York State Department of Mental Hygiene on November 1, 1944. Milton M. Grover, M. D., assistant director of Hudson River State Hospital and acting medical inspector since May 1, 1944, was assigned on November 1 to full-time duty with the Bureau of Inspection in the New York City office of the Department.

BRIGADIER J. R. REESE GIVES SALMON MEMORIAL LECTURES

Brigadier J. R. Rees, consulting psychiatrist to the British army, delivered the 1944 Thomas William Salmon Memorial Lectures at the New York Academy of Medicine on November 20, 21 and 22 on the theme, "The Shaping of Psychiatry by War." Condensations of the three lectures, "The Frontiers Extend," "Opportunities Emerge" and "The Way Ahead," were given later in other cities. Short abstracts of them have been appearing in *Mental Hygiene News*.

PSYCHOPATHOLOGY JOURNAL CHANGES NAME

The "Journal of Criminal Psychopathology" has changed its name to the "Journal of Clinical Psychopathology and Psychotherapy" and has become the official organ of The Association for the Advancement of Psychotherapy. V. C. Branham, M. D., superintendent of the Woodbourne Institution for Defective Delinquents, continues as editor.

DR. MacCURDY PRESIDES AT MENTAL HOSPITAL SECTION MEETING

Commissioner Frederick MacCurdy, M. D., of the New York State Department of Mental Hygiene, presided as chairman at the first session of the newly-organized mental hospitals section of the American Hospital Association on October 5, 1944, during the annual meeting of that association in Cleveland. Thirteen directors of New York State mental hygiene institutions were among those present; and Clarence H. Bellinger, M. D., read a paper on the organization and management of "shock" therapy services. Opening the section meeting, Dr. MacCurdy gave a statistical review of the mental hospital situation in the United States, noting that there were approximately 560,000 beds in mental hospitals in the United States and some 120,000 in institutions for mental defectives. He estimated that about 85 per cent of institutionalized patients were in hospitals maintained by the various states, that about 2,000 were in family care and about 60,000 on convalescent or parole status.